



Managing Workplace Stress: An Appreciative Approach

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A thesis in partial fulfilment of the
requirements of Anglia Ruskin University for
the degree of Doctor of Philosophy

ABSTRACT

ANGLIA RUSKIN UNIVERSITY
FACULTY OF HEALTH, SOCIAL CARE & EDUCATION

DOCTOR OF PHILOSOPHY

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January 2013

The presented thesis discusses an investigation conducted into the improvement of employee experiences of stress in the workplace. It is estimated that 11.4 million working days were lost in 2008-2009 due to stress-related outcomes, and that stress was described as the top cause of long-term sickness absence in 70% of all public-sector organisations in 2010-2011 (CIPD, 2011a). Indeed major studies have associated chronic stress with individual outcomes such as increased cardiovascular disease, depression and burnout.

The work, conducted within one department of a borough council organisation in the East of England, had two main objectives: the discovery of 'daily hassles' that comprise organisational stressors for staff and the intervention design aimed at improvement of stress. A novel mixed-methods approach combining quantitative surveys with Appreciative Inquiry (AI) was utilised, with five phases of inquiry conducted. The surveys (Stages 1 and 5) were utilised to assess the experience of work-related stress and Burnout. Stages 2, 3 and 4 were employee completion of daily logs, semi-structured interviews and focus groups. The ultimate aim of the qualitative work was to design a number of interventions for the improvement of stress.

A local stress theory, designed via the mixing of convergent qualitative and quantitative outcomes, found that professional efficacy, relationships and creativity buffered the impact of three major stressors: (too many) demands, (lack of) managerial support and (poorly communicated) organisational change. These translated into concrete examples of procedural 'hassles' and a number of organisational interventions were designed with staff and subsequently implemented into the organisation.

It is concluded that the methodology used was fruitful without being largely resource-demanding for either employees/participants or the organisation. Also while the mixing of AI methodologies with quantitative surveys can appear contradictory, it is demonstrated that the pragmatic approach taken led to strong research and practitioner-based outcomes. Lastly the work has demonstrated both originality and new knowledge in a variety of areas, as well as opening a number of future research questions and avenues.

Key Words:

Appreciative Inquiry; Daily Hassles; Management Standards;
Organisational Stress; Stress; Workplace Stress

Acknowledgements

**To: Shell & Eva, Mum & Dad
Andy & Carol too**

I didn't want to write an Oscar-style 'thank-you' acceptance speech, but the first half of this will be I'm afraid! A year and a bit into the whole of the research process we found out that Shelley was pregnant - and what a great (but challenging) few years it's been since then! So they're obviously the first people to say thank you to - I couldn't have done it without either of you. And I was so lucky to be able to spend so much time at home seeing Eva grow up while I was writing - and this is where the trust, help and guidance of Andy and Carol come in. Without the two of them (and their fears when the research wasn't going our way...) this whole thing just wouldn't have happened. They've guided me, pushed me, helped me in every way - I couldn't ask for better supervisors. THANK YOU BOTH SO MUCH!

There are obviously other people who have helped too - mum, dad, grandparents, Mark, Sarah, Zoe, Phoebe, Mark & Emmanuel. You've all provided the support without which I'm pretty sure I'd have had some sort of break down! Actually...Mark just made me get drunk too often and Emmanuel knows loads about football - that was the role those two performed!

Some Random Things...

- When I started my undergrad degree, my friends had a bet on me being the first person to drop out as all I did was work in a bar, party and sleep!
- I'm pretty sure that I would've finished this thesis a lot earlier if it wasn't for Eva crawling up to me every two minutes while I was trying to work!
- Eva was violently sick all over my annotated copy of the thesis just a few days before the VIVA!

Shelley and Eva - Love you both!
Table of Contents

List of Tables

Page and table numbers, as well as table name for the tables depicted within the current thesis.

Page No.	Table No.	Table Name
10	1	Literature review search table.
81	2	UK and participating organisation turnover figures.
83	3	Long term sickness absence causes in participating organisation.
84	4	Working days lost due to stress in participating organisation.
106	5	Previous study reliability calculations for the MSIT.
110	6	Previous study reliability calculations for the MBI-GS.
133	7	Thematic analysis of semi-structured interviews procedure.
139	8	Survey 1 demographic information.
140	9	Survey 1 MSIT analysis tool outcomes.
140	10	Survey 1 MBI-GS scores and standard deviations.
142	11	Survey 1 Cronbach's alpha outcomes for the MSIT and MBI-GS in the presented study.
142	12	MSIT & MBI-GS bivariate outcomes in Survey 1.
144	13	Survey 1 linear regression analysis outcomes.
146	14	Threshold scores for the MBI-GS.
147	15	High vs. Low Scoring in the MBI-GS focussing on MSIT outcomes from Survey 1.
148	16	Survey 2 demographic information.
149	17	Survey 2 MSIT analysis tool outcomes.
150	18	Survey 2 MBI-GS scores and standard deviations.
151	19	MSIT & MBI-GS bivariate outcomes in Survey 2.
152	20	Survey 2 linear regression analysis outcomes.
153	21	High vs. Non-High Scoring in the MBI-GS focussing on MSIT outcomes from Survey 2.
155	22	Mean differences between Survey 1 and Survey 2 scoring.
166	23	Results from the Log phase.
178	24	Results from the Interview phase.
185	25	Results from the Focus Group phase.
191	26	Synthesised similarities and differences for areas working well according to Log and Interview outcomes.
191	27	Synthesised similarities and differences for areas requiring improvement according to Log and Interview outcomes.
206	28	Change action plans presented to Service 6 management.
210	29	Management response to suggested intervention implementations.
229	30	Present study results compared to previous studies
249	31	Table showing originality and new knowledge of presented research.

List of Figures

Page and table numbers, as well as table name for the figures depicted within the current thesis. The page numbers reflect the first page on which these figures are presented.

Figure No.	Page No.	Figure Number & Name
1	3	The 4-D Appreciative Inquiry cycle.
2	56	Handy's 'Power' culture.
3	57	Handy's 'Role' culture.
4	58	Handy's 'Task' culture.
5	60	Handy's 'Person' culture.
6	75	Conceptual framework.
7	78	Structure of the participating organisation.
8	82	Working days lost due to illness in participating organisation.
9	101	The 5 'D' Appreciative Inquiry cycle.
10	102	The five phases of the presented research.
11	138	The five phases of the presented research, focussing on the Survey phase.
12	157	The five phases of the presented research, focussing on the Log phase.
13	168	The five phases of the presented research, focussing on the Interview phase.
14	180	The five phases of the presented research, focussing on the Focus Group phase.
15	194	Mixed method typology in the presented research.
16	196	Convergent MSIT and qualitative results for areas working well.
17	197	Convergent MSIT and qualitative result factors for areas requiring improvement.
18	199	Areas working well according to qualitative outcomes.
19	200	Divergent MSIT factors found to be requiring improvement.
20	201	Local stress theory.
21	241	Updated conceptual framework.

List & Summary of Discussion Boxes

List of the discussion boxes in the thesis, designed to practically illustrate important points. Page numbers, name and a summary are depicted.

Page No.	Discussion Box Number & Name	Discussion Box Summary
12	1 Example of Response theory.	Response theory explanation of divorce as an acute and chronic stressor.
16	2 Example of Stimulus theory.	Stimulus theory explanation of divorce as an acute and chronic stressor.
19	3 Example of the Transactional theory.	Transactional theory explanation of divorce as an acute and chronic stressor.
26	4 The JDCS in context.	Brief discussion as to how the JDCS fits with the rest of the project
61	5 Handy's typology and psychosocial stress interventions.	How Charles Handy's typology can inform and shape psychosocial stress interventions in the presented study.
91	6 Qualitative and quantitative methods in the presented study.	The types of qualitative and quantitative research method utilised within the presented research.
92	7 Mixed methods & pragmatism in the presented research	How each concept of mixed methods and pragmatism are utilised and combined in the presented research.
98	8 The 5 principles of AI and the presented study	How each of the five Appreciative Inquiry principles is taken into account in the presented research.
102	9 AI and pragmatism	Combining a pragmatic approach with AI methodologies, which utilise a social constructivist underpinning.
105	10 MSIT in the presented research.	Why the MSIT is used in the presented research.
111	11 MSIT & MBI-GS in the presented research	An explanation of the purpose of using the MSIT and MBI-GS in the presented study.
114	12 The Logs and Appreciative Inquiry	How the log data outcomes phase fits into the AI process.
120	13 Semi-structured interviews and Appreciative Inquiry	How the semi-structured interview outcomes fit into the AI process.
122	14 Focus groups and Appreciative Inquiry	How the focus group interview outcomes fit into the AI process.
125	15 Self-report measures	How and why self-report measures are used in the presented research.

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January 2013

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Chapter I:

Introduction

Chapter I: Introduction

My overt interest in workplace stress began while undertaking an MSc in Occupational Psychology in 2008. However, I have always had an interest in the overarching realm of psychology and business. Both of my parents have worked for the NHS in different psychological health units thus fuelling my interest in the subject. However, it was not until I undertook a BSc (Hons) in Psychology from 2004 to 2007 that I even realised that the combination area of Occupational and Health was something that existed as an area of study, and after directing my studies toward this area in the final year of my undergraduate degree I decided to further enhance my learning in the subject.

Whilst undertaking an MSc in Occupational Psychology, of the eight areas that are studied it was the Health, Safety and Design of Environments that interested me most, and stress within this area provided the greatest emphasis on learning for me. Therefore I conducted my MSc dissertation in this area, looking at stresses in the emergency services and methods which employees adopt to deal with these often acute stressors. I greatly enjoyed this piece of research and presented it at the 2009 Division of Occupational Psychology international conference, prompting me to pursue my interest in this area and make it my area of choice. Therefore, when I encountered the opportunity to further enhance my research and learning in this area at Anglia Ruskin University, combined with the opportunity to teach further at Higher Education-level, I took the chance to move across the country and begin a new opportunity to learn, research, and enhance my own personal portfolio.

1) Project Description

The main premise of the project is to discover what stressors individuals within a particular directorate of the participating organisation (PAO; a borough council organisation in the East of England) face on a day-to-day basis, design a 'local stress theory', and to devise interventional methods of dealing with these psychosocial stressors, using a participative Appreciative Inquiry approach. Appreciative Inquiry (AI)

was born from and has since diverged from Action Research (AR) approaches to organisational and group development and change (although AI has also been used as a tool of AR), and puts a 'positive spin' on employees' working lives via the use of appreciative questioning. AI is a relatively new technique which uses a similar style of cycle to that utilised by AR practitioners, although it has been criticised (as have many other change techniques) for its lack of evaluative techniques (Richer et al., 2010).

The process by which AI is conducted is never as 'clear cut' and 'clean' as the cyclical processes suggest (see *Figure 1*). However, for the purpose of this introductory chapter the AI cycle will be demonstrated as one overarching cycle. Therefore, below is a demonstration of a general AI cycle representing the main stages of the project:

2) Dreaming

4) Destiny

1) Discovery

3) Design

Figure 1: The 4 D's of Appreciative Inquiry

**Affirmative
topic choice**

AI was originally conceptualised by Cooperrider and Srivastva in 1987, and the model is said to consist of a four-phase cycle, as shown above, known as the '4 D's' (McAllister & Luckcock, 2009). These are:

1. **Discovery** – what's working well. Discover the positive exceptions and successes in the employees' everyday working life.
2. **Dreaming** – the ideal service. Create a new vision of the future, thus allowing new possibilities to arise.
3. **Design** – an innovative service. Translates what was 'dreamt' in the previous stage into specific work design on how a better service could be designed.

4. **Destiny** – deliver the innovative service. Create and sustain that which is designed in the previous stage.

However, as previously mentioned one of the main drawbacks to the use of this original AI design is that there is no evaluative phase presented, and as such most AI studies have overlooked this crucial element of any research (e.g. Richer et al., 2010). Therefore the current thesis presents a conceptual addition to the cycle, namely a fifth 'D'.

5. **Deliberate** – evaluate the AI process and procedures, in order to determine the suitability of use in the presented situation.

Finally throughout the thesis a number of 'Discussion Boxes' are presented. These boxes are to act as examples of the specific issue to which they are related, as well as used to link different themes and perspectives introduced throughout the thesis. For instance, the first such box (**Discussion Box 1**) refers to response theories of stress, and explains the response theory in terms of divorce, an event widely understood to place individuals under both chronic as well as acute stress.

2) Originality and New Knowledge

In order for any project to be considered of doctoral level, two distinct issues need to be addressed: how the study is original, and how the study adds new knowledge to the field. The current thesis adds originality and new knowledge in the following ways:

- An extensive search of the literature found that Appreciative Inquiry techniques have not been utilised when researching stress in the workplace.
- No AI research study has ever been conducted within the participating organisation (originality).
- From a review of the literature, it is clear that AI studies which have conceptualised a final evaluation phase, to be known as 'Deliberate' – the fifth 'D' (new knowledge), are lacking.
- The current study includes the development of a transferable process which can be applied across the participating organisation (originality).

- Few studies have up to this point used empirically-based, participatory approaches to stress management (originality and new knowledge).

Simply by conducting an Appreciative Inquiry study within the participating organisation (PAO) is in itself providing an original contribution. Therefore a new and original perspective will be gained by the collaborating organisation due to the methodology used and the participants that will be taking part. Included in this new perspective will be a greater understanding of the psychosocial stressors faced by participating employees in the organisation, as well as a 'local stress theory' which will provide both the organisation and researcher with a thorough theoretical understanding of the issues underpinning stressful issues within the organisation.

Secondly, one of the most serious accusations levelled at the use of AI research for organisational development is that a final evaluation stage in the process is often sub-standard or even missing. Therefore the current thesis proposes a new phase in the AI cycle, to be known as the 'Deliberate' stage, so called because the researchers are to deliberate (or think) over the successes or failures of the new processes which had been created during the Appreciative process.

Important for both the organisation and originality of the project at a doctoral level is the generalisability of both the methods used and the findings in the participating organisation. Once the local stress theory has been discovered and the implementation of the psychosocial stress interventions have been 'successful' within the context of the department that is to take part in the study (known as Service 6), the organisation will be able to successfully roll the systemic and corporate-based interventions out to the rest of the organisation. Additionally the mixed methods approach taken, as well as the AI methodology in particular, will be able to be used in future research projects.

Finally, a conceptualisation offered by Ivancevich et al, (1990) identified three 'levels' of workplace stress intervention depending on what the intervention is being aimed at. The current study, using an

Appreciative Inquiry methodology, utilised an approach focussed on changing the psychosocial working environment (so-called 'primary' level interventions) as opposed to secondary interventions, which are aimed at increasing an employee's ability to deal with stress in the workplace, or tertiary interventions which help employees to recover once stress has become a problem. Reviews of the literature (for example Jordan et al., 2003; Randall, Griffiths & Cox, 2005) have identified primary level interventions as those that are the most underused and understudied for a variety of reasons, although they have the potential to be the most powerful and long-lasting interventions. Therefore the current study will add some much-needed depth of knowledge to the already existing literature, particularly with respect to the use of AI methodologies in the workplace.

3) Main Research Questions and Focus

The first objective of the proposed project is to apply an Appreciative Inquiry research model for the creation of a 'local stress theory', depicted to inform of the everyday stressors that employees within a particular borough council organisation face. A further outcome is the design of intervention methods to improve upon these stressors. Therefore the main research questions and objectives are as follows:

Objectives:

- To develop a local stress theory.
- To develop an appropriate intervention strategy based on staff views.

Primary Research Question:

1. Can the results of a participatory Appreciative Inquiry methodology be successfully implemented into a local borough council organisation?

Secondary Research Questions

2. What are the sources of day-to-day stress (i.e. 'daily hassles') for employees in the borough council.
3. Can an AI methodology be used to design feasible psychosocial stress interventions for the improvement of daily hassles within a local borough council organisation?

4) Indicative Thesis Structure

The presented thesis runs through 11 chapters which are interconnected, and designed in such a way that present a running commentary of the phenomena under consideration. As already discussed the project, in a nutshell, seeks to utilise a novel appreciative methodology to improve upon the experience of psychosocial stress for employees in a borough council organisation in the East of England.

The work begins in **Chapter II** with a critical exploration of some of the theories proposed for the experience of stress, as well as the two predominant theories of occupational stress which are used by researchers to investigate the phenomena. **Chapter III** looks at the impact that stress can have on the individual employee, and in turn the organisation, in forms such as sickness absence and compensation claims. An exploration of some of the occupational stressors which have been identified in research is given as well as a typology which has been utilised for the organisational management of stress.

Chapter IV plays two distinct parts: to help conceptualise the participating organisation, and to more fully gain an understanding of organisational development and change practices. **Chapter V** presents a conceptual framework within which this work will be located, as well as a contextual understanding of the participating organisation (PAO). The mixed methods approach utilised within the presented research is given in **Chapter VI**, including an in-depth presentation of both the AI approach and quantitative methods used. The subsequent **Chapters VII and VIII**

respectively present the quantitative and qualitative results of the work (including the outcomes once the results of the study were mixed), and **Chapter IX** looks at how the action plans presented to senior management in the participating department of the PAO were implemented, as well as discussing the impact that being an 'outsider' within the organisational change process has had on the outcomes of the study. Lastly **Chapter X**, Discussions, shows the results of the presented research in comparison to previous research findings, and **Chapter XI** brings together and finally concludes the work.

Chapter II:

(Occupational) Stress & Organisations

Chapter II: (Occupational) Stress & Organisations

The following chapter outlines a very important aspect of background research, essential to put the thesis into the correct context: stress and organisations. First of all a range of definitions and approaches to stress are critically discussed, together with an assessment as to the appropriateness of their use in the current project. Similarly the main theoretical writings on psychosocial stress in the workplace are critiqued, again with a decision of appropriateness of fit within the context of the current study.

Literature searches were conducted from various sources. For each of the subjects included in the literature review the format followed was, as a starting point, a wider reading of the subject area, in particular from textbooks derived from three main library sources: the Anglia Ruskin University library (e-books and textual versions), the University of Gloucestershire library (textual versions) and the Open University online e-book library. For example, therefore, searching for textbook-based literature on the Job Demands-Control-Support model were made including searches for this specific term, searches for psychosocial stress theories, and searches for stress theories from text books. Following these wider inquiries more specific e-journal searches were conducted using the EBSCOHost research database and the Open University online library. Online libraries within the EBSCOHost database include PsycINFO, Business Source Premier and PyscARTICLES. Searches within both online databases were undertaken via the use of specific explorations for journal article titles as well as searches for 'key words' attached to the texts. Therefore the searches were comprehensive and wide-reaching, using a variety of appropriate sources which fit the literature.

Table 1: an example table detailing some of the searches, number of hits and databases which were included during the literature review section (all full text searches).

Search Subject	Search text	Number of Hits	Example Databases
1a) Theories of Organisational Stress			
Job Demands-Control-Support Model	Job Demand-Control (title search)	28 hits	PsycARTICLES, PsycINFO, CINAHL Plus w/Full Text
	Job Demand-Control (all text search)	96 hits	
Effort-Reward Imbalance Model	Effort-Reward Imbalance (title)	37 hits	PsycINFO, PsycARTICLES, ARU Library
	Effort-Reward Imbalance (all text)	80 hits	
1c) Costs of Organisational Stress			
Potential effects of stress on employee health	Stress; Cardiovascular (title search)	304 hits	British Nursing Index, CINAHL Plus w/Full Text, Medline
	Stress; Sleep (title search)	89 hits	
	Work; depression (title search)	94 hits	
1e) 'Managing' Stress at Work			
Primary, Secondary and Tertiary Interventions	Change (title); primary intervention (all text search)	52 hits	Business Source Premier, PsycINFO, Professional Development Collection

1) (Occupational) Stress

In 2009 the Health and Safety Executive (HSE) released the results of the Psychosocial Working Conditions survey which revealed that approximately 16.7% of all individuals found their job very or extremely stressful. Stress can have complicated and potentially dangerous outcomes, with the possibility of affecting all areas of society and the workplace. Despite this, providing an accurate and widely recognised and agreed on definition of stress has proven elusive.

1a) What is Stress?

The term 'stress' has been used in the scientific literature since the 1930s, although the word did not become widely utilised until the late 1970s and early 1980s, and today the word is used by the general public and some researchers alike to describe many negative daily experiences (Rice, 2000). In particular, Beehr (1998) proposes that the over-reliance

on the use of the word stress within modern language means that there is a great deal of confusion surrounding the area. This everyday and blasé use of the word is one of the reasons why it is at times so extremely difficult to define stress as the word creeps into daily usage.

Use of the word stress in such an everyday way decreases the potency of the word, and in everyday conversation people may be heard speaking of stress in a manner other than how it is used in scientific literature. The word is used throughout many different types of literature, with the lay person often referring to stress as any mildly irritating issue, academics defining stress due to the theory that they decide to adopt when teaching or researching the subject, and medical and health professionals perhaps taking another view. While it would be irresponsible to claim that any of the definitions used is incorrect, this mishandling seemingly detracts from the serious nature of the stress phenomenon, meaning that it is often misused and misrepresented in everyday language. However, the scientific literature which is directly related to stress also plays a part in the confusion over the use of the word.

A further reason why it is often considered difficult to define a construct such as stress is that there are numerous, varying and often competing theories. Each definition has its own method of conceptualising and rationalising the phenomena, and as such each has its own understanding of what stress is, what causes stress and therefore different definitions of stress (Rice, 2000). There are many different models of stress across the medical, health and occupational literatures (amongst others), each with a differing emphasis. For example, health psychologists explain the physiological and psychological basis of stress in relation to various health and medical outcomes, whereas others such as organisational psychologists investigate the antecedents and organisational outcomes related to workplace stress (Millward, 2005). As such it is important that some of these differing theories are understood and explained in order to 'settle on' a definition applicable to this study.

1a.1) Stress as a Response (Selye, 1950)

The origins of response-based theories and definitions of stress can be found in medicine and are usually viewed from a physiological perspective (Cooper, Dewe & O'Driscoll, 2001). The General Adaptation Syndrome (GAS) theory of stress was one of the first to look at stress as a bodily response to external stimuli and was initially developed and examined by Hans Selye who was particularly interested in the non-specific bodily responses to particular diseases in medical patients. He therefore viewed stress as:

“nonspecific response of the body to noxious stimuli” (Selye, 1956, pp. 12).

According to Selye therefore, stress is a physiological response to external stimuli, with the response being non-specific, i.e. all individuals have the same physiological reaction to any noxious stimulus. He attempted to explain and describe the physiological response of the body to stressors via a mechanism known as the General Adaptation Syndrome (GAS). The GAS stress response is said to be a defence reaction to stressors and progresses in three stages, although individual reactions to stressors were not seen as stressor specific (Selye, 1950). The stages identified by Selye were as follows (Selye, 1950):

Stage 1 – Alarm Reaction: following exposure to the stressor the individual's defence mechanisms are awakened to help endure an initial period of lowered resistance to the stressor. The sympathetic nervous system (SNS) is activated, releasing hormones such as adrenaline (Oberg, 2009) and causing characteristic physiological responses such as increased heart rate, blood pressure and respiration rate (Sharp, 1996). Such neuro-hormonal responses mean that onset of the alarm reaction can occur anywhere between moments after exposure to several minutes after.

Stage 2 – Resistance: this is characterised by the vanishing/diminishing of the initial symptoms and if successful a return to equilibrium. This state is meant to last a short time, but often can last beyond this second stage (Oberg, 2009).

Onset of resistance reaction can occur in minutes to hours after exposure.

Stage 3 – Exhaustion: If the stressors continue or the individual's defence mechanisms are not effective enough over time the body's resources are run down and is unable to maintain equilibrium, with the individual moving into the exhaustion stage. Should an individual be in this stage for an extended period of time, long-term damage may result. This is chronic stress, i.e. where the stressor is present continuously or repeatedly over a prolonged period of time and therefore causes a more long-term stress reaction.

Discussion Box 1: Example of Response Theories – Divorce

Divorce is an obvious and well-known potentially extreme source of stress. According to response theories, all individuals who encounter divorce and perceive it as a stressor will go through three reactionary stages. At first resistance to the stressor is low, but the following 'counter-shock' reaction initiates defence mechanisms. During the second stage, the individual adapts to the continued divorce stressor and if the overload persists to be a problem then the third stage, exhaustion, where one's reserves have been depleted, occurs. Continued exhaustion would eventually lead to both psychological and physiological outcomes.

1a.1.1) Critique of Response Theories

Despite the originality of the GAS theory of stress, over the decades it has been the subject of much negative reaction. One such negativity involves the implication that cognitive variables and other individual differences such as personality play very little role in the contribution to the initiation or moderation of the GAS. The absence of these factors may therefore short-change what actually occurs in psychological stress (Arnold, 2005). The GAS, for example, describes a non-specific bodily response to stressors which allows no part played for individual perception/understanding of a situation, or particular coping strategies utilised by different people. For example Ravalier and Biggs (2009) found that, when confronted with very similar situations, members of the police

force and members of the fire service can react very differently to extreme stressors, and even members from within the same police and fire departments react extremely differently to the same stressful situation. Other research has shown that responses to stimuli can depend on the type of hormonal secretion (Cooper, Dewe & O'Driscoll, 2001). Furthermore, other theories place an emphasis on the interaction between an individual and their environment as opposed to a generalised reaction within all individuals to any stressor.

However, despite these numerous and quite serious challenges to the theory it has had a major influence on subsequent stress theories, and elements of Selye's theory can be found in many of its subsequent successors (Arnold, 2005). Additionally, a relatively recent meta analysis of the impact of different types of stressors on the immune system have found strong empirical support for the general principles of the GAS, and in particular when related to chronic stress. Segerstrom and Miller (2004) performed meta-analyses using more than 300 empirical articles, taking into account different types of stressor and various adaptations of Selye's original GAS. Results indicated that, as hypothesised in Selye's model of the GAS, chronic stressors had negative effects on the majority of measures of immune system responses, while also indicating that there was no gender difference in immuno-response or among different age groups. Similarly, a literature review by Cohen, Miller & Rabin (2001) found that the evidence suggests an association between psychological stress and reduced antibody response to immunisation.

Finally, the relatively new concept of Allostasis and Allostatic Load (McEwen, 1998) has diverged from the Response-based literature, and can be claimed to be particularly pertinent with respect to the 'Exhaustion' phase of the GAS. The concept of Allostasis is an extension of Homeostasis, representing the way in which human physiological systems such as the immune and cardiovascular systems respond to physical, psychosocial and environmental changes (McEwen, 2002). In comparison to Homeostasis it emphasises the different ways in which these systems can adapt to stressful challenges (Logan & Barksdale, 2008). However,

should the stress response not become inert following response, or are overused by chronic challenges/stressors, the long-term effects may be damaging and lead to cumulative 'wear and tear' on the aforementioned physiological systems (Langelaan et al., 2007). This condition is known as *Allostatic Load*, with over-exposure to repeated and cumulative load over a period of time resulting in various organ diseases. The concept of Allostasis reinforces the idea of 'Exhaustion' as a potential outcome of the presence of chronic stressors, and so challenges the argument that the basic premise of the GAS is incorrect.

One of the most prominent critiques of Selye's GAS, and response theories in common, relates to the general nature of the responses demonstrated in the GAS. The GAS does not address the issue of psychological response to stressors or that a response to a potential threat may in turn become the stimulus for another response. It has therefore been assessed as too simplistic, with Christian and Lolas (1985) suggesting that although the GAS framework is still valid for some typical stressors (e.g. physical factors such as heat and cold), it is not adequate for the representation of psychosocial factors. It is also thought that the stress reaction is adaptive instead of general, and as such response-based theories have been criticised for this.

Other issues that are associated with the response-based approach are that stress is considered as a generic term which takes into consideration a wide range of manifestations. However, disagreements exist about these actual manifestations, as well as about where within the organism/system stress is manifested; with clarification of this second issue problematic because individuals may adapt to any potential source of stress, meaning the responses will vary over time. Finally, and maybe most importantly, Selye's approach (and the majority of other response-based definitions of stress) has also been criticised because they appear not to consider environmental factors in the stress process. Therefore it can be assumed that there is a tendency to ignore the stimulus dimensions of stress experiences (Cooper, Dewe & O'Driscoll, 2001).

1a.2) Stimulus-Based Definitions

These theories are originally based in physics and engineering which see stress as a 'force' exerted upon the individual. If the demand placed upon the individual is greater than the ability to deal with it then a distortion (strain) is created. The rationale of these approaches is that an external force is imposed upon an individual in a disruptive way, and if the organism's tolerance levels are exceeded, temporary or permanent damage can occur. The stimulus approach therefore suggests that chronic demands (i.e. stressors) can lead to strain and ill health (McClenahan, Giles & Mallett, 2007). Indeed, the adage "the straw that breaks the camel's back" is especially relevant here.

An individual is continuously flooded with potential stressors which are adequately coped with, but perhaps one more (possibly minor) event can move the individual from being able to cope into the realm of strain. Indeed it was Gruen, Folkman and Lazarus who (1988) argued that individual employee experience of daily hassles (or daily stressful events) would vary in the workplace. Therefore the on-going hassles which employees face on a daily basis can have a strong negative effect on well-being in comparison to other hassles. Therefore stimulus-based models treat stress as an independent variable that elicits some response from the person (Cooper, Dewe & O'Driscoll, 2001).

Discussion Box 2: Example of Stimulus Theories at Work – Divorce

According to stimulus approaches, divorce would be described as an external demand. An individual has a limited amount of resources to deal with stressors (demands) and if the divorce was either a stressor which places too much load on the individual's system, or is the last of a number of stressors which leads to system overload, then strain will occur. This strain reaction

1.a2.1) Critique of Stimulus-Based Definitions

With the adoption of stimulus-based definitions and approaches to workplace stress one of the major issues is that it does not take individual differences into account, for example variability in tolerance levels and expectations, which can justify the fact that two individuals can react completely differently to the same condition. Also, the theory reflects just one component of the stress process and says little about the process itself, i.e. does not explain the inherent properties of the different stimuli. Therefore, properties of the events themselves have been somewhat overlooked (Cooper, Dewe & O'Driscoll, 2001).

Many understand that utilising a solely objective measure of external forces which impinge upon the individual thus causing stress is unsuitable. A number of individual differences, such as levels of resilience, can account for the fact that two individuals can react in completely different ways to the same situation or their perception of specific stressors change with time. For example, in nursing the identification of major sources of workplace stress accounted for just 26% of the variance in the data (McVicar, 2003), suggesting that almost three quarters of variance is unaccounted for. As such it is now widely recognised that, in a similar manner to response-based definitions, individual differences are wrongly ignored. Additionally the traditional use of a stimulus-based definition means only one component of the stress process is reflected, indicating little about the process itself. With the definitions only focussing on one aspect of a process this draws attention away from the nature of the actual process, thus ignoring the possible relational nature of stress that may be the focus of definitions (Cooper, Dewe & O'Driscoll, 2001).

1a.3) Stress as a Transaction

Lazarus and Folkman's transactional model views stress as the result of the transaction *between* the person and their environment, rather than a product of *either* the person *or* the environment alone (Troup & Dewe, 2002). As such the theory maintains that stress encompasses a set of negative cognitive and coping variables (Perrewe & Zellars, 1999),

and asserts that the transaction between the person and the environment is only stressful due to the way in which it is internally evaluated by the individual (Crandall & Perrewé, 1995). There is therefore an important cognitive component included in the theory which differentiates it from the response and stimulus approaches. The primary mediators of these person-environment transactions are cognitive appraisals, of which there are three types (Lazarus & Folkman, 1987):

Primary Appraisal – the individual makes a judgement as to what the present situation has in store. They consider the possible effects of the demands from the situation in proportion to the coping resources available on their own well-being. If primary appraisal considers that the situational demands overshadow available coping resources the individual may decide that:

- a) The situation represents a harm or threat.
- b) Harm has already occurred.
- c) The situation is a challenge, i.e. has the potential for the individual to gain from it.

Secondary Appraisal – is triggered by the perception of a threat during primary appraisal stage. During secondary appraisal the individual determines the coping resources available, or the behaviours which can be performed to deal with the threat. It is important to note that primary and secondary appraisal can occur concurrently and interact with each other, making measurement difficult.

Reappraisal – the continual evaluation, changing or re-labelling of earlier appraisals as the dynamic situation changes. As such, something that was originally labelled a threat may later be reappraised as a challenge or irrelevant.

The approach therefore sees stress as not a factor which resides within the individual or within the environment. It is described as a dynamic process that involves interaction with the environment, appraising these interactions and making attempts to cope with the stressors (Cooper, Dewe & O'Driscoll, 2001). Individual differences such as interests and agendas vary from individual-to-individual and even

within the person throughout situations and time, as well as a dynamic and potentially ambiguous environment, means our attention is distributed selectively and we can evaluate situations in different ways (Crandall & Perrewe, 1995).

1a.3.1) Coping in the Transactional Model

The transactional model, unlike the predecessors already analysed, explicitly includes strategies for coping with stress. The model defines coping as:

“Constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (Lazarus & Folkman, 1984, pp. 141).

The model therefore defines coping as being process-based rather than an inherent trait, and describes such processes as different from automatic adaptive behaviour that has been learned or such behaviour as described in previous theories like Selye’s General Adaptation Syndrome. Also, coping involves ‘managing’ the situation, and as such may or may not necessarily mean that the individual completely removes and deals with the problem (Lazarus & Folkman, 1987). In addition, it views coping as a process (i.e. it is not static) due to the environment constantly changing (Crandall & Perrewe, 1995). Lazarus and Folkman (1984) identified two forms of coping:

Problem-Solving Coping: are problem-solving strategies and can include efforts to define the problem, the generation of alternative solutions, weighing costs and benefits of various actions, taking actions to change situations which are changeable, and if necessary, learning new skills (Crandall & Perrewe, 1995). These physical manifestations are directed towards changing some aspect of the outer environment, or inward to alter part of the individual themselves, for example cognitions. Many of those aimed at the individual fall into the ‘appraisal’ category, and can include changing the internal cognitions about the event/situation or recognising the existence of personal resources and strengths to help deal

with the situation at hand (Lazarus & Folkman, 1987). Problem-focussed coping tends to be positive and constructive in attempts to eliminate/reduce stress. For example, problems in the workplace often lead to individuals considering problem-focussed coping strategies, such as gaining help from colleagues or unions. Similarly Bond and Bunce (2000) describe the organisational change interventions that they successfully implemented into an organisation which empowered and encouraged employees to take action upon their own stressors as a problem-focussed approach. However, problem-focussed coping strategies are not always available to individuals, for example in many occupations it may not be feasible for an individual to reduce the sheer workload that they face.

Emotion-Focussed Coping: is directed toward decreasing emotional distress via methods such as distancing themselves from the issue, avoiding stressful situations or people, selective attending towards non-stressful stimuli, and blaming others for what may have been their own mistake (Crandall & Perrewe, 1995). Changing the way an encounter is cognitively constructed without changing the actual situation is comparable to reappraisal, and when the objective situation cannot be changed explicitly is the most common type of coping utilised (Rice, 2000).

Therefore coping mechanisms are the methods individuals use to maintain an internal homeostasis, i.e. the processes used to manage felt discrepancies between demands and available resources (Quine & Pahl, 1991). Resources available for coping are aspects of the environment, whether they are internal or external or directly or indirectly under the influence of the individual (Shapiro, 1983).

Discussion Box 3: Example of Transactional Theories – Divorce

When faced with divorce, primary appraisal would mean a person evaluates this potential threat. If the potential threat (divorce) is evaluated as stressful, secondary appraisal assesses one's coping resources and options and thus addressing what he/she can do about the situation. This is where emotion-focussed or problem-focussed coping strategies could be used. Should the coping strategies, or re-appraisal strategy, not be successful

1a.3.2) Daily Hassles in the Transactional Approach

Research literature has demonstrated that smaller, everyday stressors can have an impact on mental health in the same way that major life events can. These everyday stressors are known as 'hassles' within the psychological literature (McIntyre, Horn & Matsuo, 2008). The daily hassles, or minor events, approach defines stress in a transactional point of view, assuming stress outcomes are due to the interaction of individual appraisals of an environmental situation, and in particular the emphasis that an individual places upon these situations (Chamberlain & Zika, 1990). Indeed, an early description by Kanner et al. (1981, pp. 3) defines hassles as, "irritating, frustrating, distressing demands that to some degree characterise everyday transactions with the environment". Whether an event is appraised as a daily hassle will differ between individuals, depending on interpersonal, social and coping contexts (Chamberlain & Zika, 1990).

Much of the research literature which has investigated the impact that daily hassles can have on individuals has found that hassles have a negative impact. Despite this, Jabaaij et al. (1993) reported the results of two studies within one journal article and wanted to look at the impact

that daily hassles can have on a number of immune system measures. The results indicated that daily hassles had no impact upon the immunoresponses measured. However, research has more generally found that hassles have negative effects on various aspects of the individual. For example an early longitudinal study by Lu (1991), in which a daily hassles questionnaire was completed twice over two months, found that daily hassles were a 'significant predictor' of poor psychological health. Indeed these daily hassles were found to be more impactful on negative mental health than unemployment, an already known risk factor for negative mental health. Similarly O'Connor et al. (2008) found that workplace daily hassles were strongly associated with poor eating habits among 466 local government employees.

1a.3.3) Critique of the Transactional Model

One of the biggest strengths of the transactional theory is that it takes into account the dynamic relationship between the individual and his/her environment, and the experience of stress as the result of exposure to psychosocial risk factors, with health outcomes also associated (Cox, Griffiths & Houdmont, 2006). Importantly, the theory accommodates subjective experiences in a way that many models and definitions do not because it looks at individual subjective appraisals of the environment, taking into account available coping resources (Cox, Griffiths & Houdmont, 2006).

Despite this, the definition of coping given does not explain the possible negative effects for those who cannot cope (Quine & Pahl, 1991), simply that demands may exceed resources available to cope with them and therefore negative health consequences are not considered within this definition. Also it is apparent that, over time, the same person (or group of people) can often redefine the stressfulness of a particular environmental stimulus indicating the dynamic nature of the method in which individuals (and groups of individuals) appraise stressful situations (Haslam, 2004).

The transactional model is an important model, particularly with respect to psychosocial working conditions and their relation to stress. Additionally, it adequately combines aspects of the individual with environmental stressors, an approach that neither the stimulus- and response-based definitions attempt. The stimulus and response approaches both focus the 'blame' for stress squarely at the feet of the individual due to being unable to deal with amount of stress levelled at them, or due to physiological responses toward the stress. The transactional model, however, differs. While the individual obviously plays a strong part in the model, the transactions between the individual and the environment lead to stress and as such 'blame' is not attributed to the person alone.

1b) Occupational Stress - Theories

Under the Health and Safety at Work Act (1974), employers in the United Kingdom are law-bound to ensure positive health and safety working practices for their employees, with the focus being on both physical and psychological well-being (Cousins et al., 2004). The term 'psychosocial' refers to the interior processes that occur within an individual, with 'psychosocial stress' therefore referring to the internal processes which can lead to stress outcomes. The concept of psychosocial working conditions with respect to stress in the workplace realises that there is a dynamic relationship between the organisation/organisational environment and the employees within the organisation, and appreciates that within this relationship there are going to be both costs and rewards.

Over the last fifty years or so, a number of models have been developed in order to attempt to explain the relationship between the psychosocial work environment and health and well-being (De Croon et al., 2000). Many current studies investigating the phenomenon of psychosocial work stress use one of the two theories to be critically discussed below as the basis for their research, and literally hundreds of pieces of research literature have utilised these models: the Job Demand-

Control(-Support) Model of work stress (Karasek, 1979; Karasek & Theorell, 1990) and the Effort-Reward Imbalance model (Siegrist, 1996). For example, a simple brief search of all available databases on the EBSCOHost online journal holder for the terms 'Job Demands Control' and 'Effort Reward Imbalance' in the title led to 103 and 173 results respectively, with these results only representing a sample of the many studies which have included the two models.

1b.1) Job Demand-Control Model (Karasek, 1979; Karasek & Theorell, 1990)

Throughout the 1990s European-wide surveys found that time constraints and work intensity both increased (European Foundation, 2001). Similarly although autonomy (job control) increased between the years 1990 and 1995, these enhanced levels stagnated or declined in the preceding five years. Knowledge of the way in which employees' working lives are changing is taken into account in areas such as work redesign and decisions on work models (Mikkelsen, Ogaard & Landsbergis, 2005).

The Job-Demands-Control model of stress in the workplace has been applied to research which has been conducted in many areas, influencing both academic research and workplace practice (Wong, DeSanctis & Staudenmayer, 2007). The model maintains that sources of workplace stress are not inherent within the individual but rather within particular aspects of the working environment (Mansell & Brough, 2005). Therefore the model asserts that strain outcomes are due to the interaction between the demands placed upon the individual within the workplace combined with the amount of autonomy, or job control, available to the employee. There are therefore two sets of predictions which have been made to impact upon the individual worker (Mikkelsen, Ogaard & Landsbergis, 2005):

1. *The Strain Hypothesis*: excessive demands (i.e. workload) are detrimental when decision latitude (i.e. level of control over one's work) is low.

2. *Active Jobs*: high demands plus high decision latitude develops learning and greater control thus allowing individuals to develop coping strategies and increase satisfaction.

The model therefore assumes that control plays a moderating role in workplace stress, allowing individuals to adapt to and improve upon working situations (Karasek & Theorell, 1990). De Croon et al. (2002) conducted a study designed to re-evaluate the interactional effect of job demands and control on psychosomatic health complaints. Participants were 1000 Dutch truck drivers, with job demands and control assessed via specifically-tailored measures. The study found significant job demands-by job control interactional effects, and also that job demands and job control had an effect on psychosomatic health complaints, supporting the original JDC model's interactional hypothesis. Similarly Bond and Bunce (2001) conducted a 12-month longitudinal quasi-experimental study and found that increased control led to decreased levels of stress and improvement in work-related outcomes. Despite this, the hypothesis for interactive effects between demands and control has often received contradictory support (McClenahan, Giles & Mallett, 2007). For example, Elsass & Veiga (1997) found little support for an interaction between job control and job demands among their sample of 316 health care workers.

In an attempt to further expand the model and understand the relationship between job demands and strain, the JDC model was developed to include social support. This expanded Job Demands-Control-Social Support (JDCS) model argues that individuals in jobs which are characterised by high demands, low decision latitude and low levels of social support are more likely to experience stress and stress-related outcomes (Johnson & Hall, 1988; Johnson, Hall & Theorell, 1989). This is known as the *iso-strain hypothesis*. The revised model has received empirical support from many sources. For example, Pierce and Molloy (1996) found that teachers who experienced high levels of burnout reported low social support, and that those with low levels of burnout had high levels of social support. Similarly, Collins, Coffey & Morris (2010) highlighted the importance of the support offered to social work students

by peers, tutors and teachers by demonstrating that those with higher levels of support reporting higher levels of general well-being.

1b.1.1) Critique of the JDC(S)

The strength of the model lies in its simplicity and the obvious practical implications (Chmiel, 2000). As demonstrated, the JDC(S) has been probably the most widely used theoretical approach to describing the effects of psychosocial working conditions for employees over the last two decades or so, but it does have its drawbacks. Firstly, there have been many reviews of the literature which have investigated various outcomes with respect to the JDCS, and with the majority of these reviews the end outcome has been that for each of the hypotheses provided with the theoretical model the findings have been ambiguous at best. For example, studies examining the strain hypothesis using simple linear additive models (i.e. high demands plus low control plus low social support leads to stress) have provided inconsistent results. Analysis of 63 studies by Van Der Doef and Maes (1999) found that while both the strain and iso-strain hypotheses were often supported, the moderating effects of control and social support were less consistent. Van Der Doef and Maes (1999) concluded that research which utilised specific control measures as opposed to more general ones were generally more supportive of the hypotheses inherent in the JDCS.

There is also some debate as to whether the JDCS is a universally applicable model. For example, women have been found to be less vulnerable to the effects of the iso-strain hypothesis (e.g. isolated strain – poor social support) than are men, suggesting that the JDCS can be perceived as a ‘male model’. For example, in a review of much of the literature looking at the particular hypotheses as described in the JDCS, Verhoeven et al. (2003) found that the male sub-population seemed to be more vulnerable to high iso-strain. However, in a European-wide study utilising the JDCS to investigate teachers’ stress no such outcome was gained in that no differences were found between male and female groups when the two were separated during statistical analysis.

The first of a further two common criticisms begins with the original suggestion that control and social support should 'match' demands exerted in order to find effects (Verhoeven et al., 2003). Secondly, it has been argued that the models' components are too simplistic and that adding more specific elements could explain more of the phenomenon at hand. In an overview of the literature, Jones et al. (1998) call for the more specific conceptualisation of the dimensions included in the JDCS. However, Theorell (1996) concluded it should be accepted that the model was never actually meant to incorporate all of the variables needed to explain the relationship between the work environment and health, but rather provide a simple model dealing with the way the organisation of work related to ill health. Despite this, the widespread use of the approach as a method of conceptualising job strain in research raises the suspicion that researchers may sometimes feel that by including a measure of demands and control in conjunction with no other work measures they have adequately taken care of psychosocial factors, whereas it should be recommended for researchers to investigate further workplace factors (Jones et al., 1998). Finally, and importantly, it should be recognised that the JDCS is a Westernised model having been published and researched most extensively in countries such as the UK, USA and the Netherlands. Therefore it is unknown how valid the model is outside of these areas (Van Der Doef & Maes, 2003).

1b.2) Effort-Reward Imbalance Model (Siegrist, 1996)

The Effort-Reward Imbalance (ERI) model of psychosocial work stress shifts away from the notion of control and toward the reward structure of work (Chmiel, 2000). The model proposes that an individuals' employment allows for the fulfilment of vital emotional and motivational needs (Smith et al., 2005). The model assumes that negative health outcomes may be due to a lack of reciprocity between the efforts exerted at work and the rewards gained (Siegrist, 1996).

More specifically, the model focuses upon the efforts that employees put into their jobs with respect to the amount of physical and

psychological demands they face. Where efforts are rewarded via occupational rewards (i.e. career opportunities, money and esteem) the employees' efforts are sustained. The model therefore maintains that imbalance between efforts exerted and rewards garnered can have negative physiological and psychological outcomes (Smith et al., 2005).

Indeed, empirical studies have shown that a lack of reciprocity between demands efforts and rewards can have negative health outcomes for individuals. For example, Van Vegchel et al. (2001) found that a state of emotional distress is a potential outcome of a lack of reciprocity, which in turn may result in decreased physical and psychological health. Similarly a more contemporary piece published by Krause et al. (2010) found that amongst a population of hotel cleaners, Effort-Reward Imbalance at work was found to have a strong relationship to poor general health and role limitations due to physical health- and emotional problems. Finally, a wide-ranging representative sample of the Danish workforce was utilised in a study looking at the relationship between ERI at work and ill-health by Rugulies et al. (2009). As the difference between Efforts and Rewards increased the risk of a decline in self-related health increased.

1b.2.1) Critique of the ERI Model

As analysed previously, empirical studies using the ERI as a base model of psychosocial stress have linked the ERI with different physiological associations such as sickness absence. However, the model seems inconsistent by the manner in which both extrinsic (e.g. physical workload, money) and intrinsic (e.g. offering emotional support, esteem boosts) efforts and rewards are distinguished, with some critics claiming that intrinsic rewards are seemingly part of an over-commitment structure. Despite the psychosocial nature of the model commentators have noted it as remarkable that little attention has been paid thus far to the relationship between work and family life as an environmental factor of possible relevance, and finally longitudinal studies are needed in order

to investigate the time-dependant effects on both effort and reward, and on the experience of high cost/low gain conditions (Chmiel, 2000).

The two theories as critiqued above are probably the two most well-used models of stress in the workplace, and although many aspects of both the ERI and JSCS have been demonstrated in various empirical studies (and reviews of literature), the present thesis is to focus using the JDCS as its primary theoretical position. Both theories can be seen to have a strong association with the transactional model, i.e. neither model lays the responsibility for a stressful reaction seemingly solely at the individual's feet, with the JDCS deriving from the stimulus approach also. The reasoning behind the adoption of the JDCS as a point of reference as opposed to the ERI in the current study is due to a variety of reasons. First of all, the JDCS has been used as the one of the reasons behind the development of the UK Health and Safety Executive's management standards, a set of values which the HSE has set as a guideline for organisations to adhere to, as well as an 'Indicator Tool' for agents to assess the company's performances against the guidelines set out. Secondly, despite both of the theories having often conflicting results with respect to research, the JDCS has been most often and most successfully utilised within organisations and organisational stress.

Discussion Box 4: How the JDCS fits with the rest of the project

JDCS, Psychosocial sources & Soft Systems Models (SSM) of Change □ Psychosocial underpinnings of the JDCS fit well with the use of SSM (**Chapter IV, Section 2a**) due to the fuzzy, human-based nature of these methods and the psychosocial focus of the current study.

JDCS & Primary Interventions □ Primary interventions of workplace stress (**Chapter III, Section 1e**) focus on the actual work environment as opposed to increasing an individual's ability to cope with stress, thus focussing on the psychosocial nature of stress.

To summarise, the presented chapter has given an overview of the most influential theories and models of stress and stress in the workplace. These approaches have also been thoroughly evaluated. The chapter has presented how these theories and models are to be taken into account within the presented research, thus putting the work into context for the current thesis. Following on from this chapter, the next looks at the literature regarding how stress impacts on individuals and organisations, as well as methods for the improvement of workplace stress. An understanding of each of these concepts is important for the presented research, and will be taken into account later in the thesis.

Chapter III:

Types, Costs & Managing Stress

Chapter III: Types, Costs, and Managing Stress

Chapter II previously evaluated some of the many theories of stress, as well as two models which have been proposed for the examination of organisational stress. The presented chapter follows on from this, and serves the purpose of illustrating why the investigation of workplace stress has the potential to be advantageous to both individual and organisational outcomes by discovering these costs as well as some of the types of stressor individuals may face in the organisation. Also a typology of methods of stress management intervention are examined, with a focus on the reasoning behind the use of primary change methodologies over secondary or tertiary approaches.

1) 'Costs' of Organisational Stress

1a) Costs of Stress to the Individual

Stress has the potential to play a central role in health (psychological and physiological) and well-being (e.g. Rosengren et al., 2004; Yusuf et al., 2004, Marmot et al., 1991). The following section of the chapter focuses on the possible health and behavioural outcomes associated with continual exposure to occupational stress. Within the workplace individuals are not likely to be subjected to acute stress responses, such as those experienced by sky divers or footballers stepping up to take the last in a series of penalties within a shootout, nor is the occupational stress literature as covered previously designed to assess such stressful situations. Therefore the following examples relate primarily to chronic strain, i.e. that which is on-going and long-lasting. As such, some of the many potential occupational stress outcomes related to the individual will be detailed, and examples of research demonstrating the link between stress and individually-based outcomes will be included.

The transactional definition of stress and strain indicates that stress occurs when an individual appraises an event as being a threat (potentially harmful) and has insufficient coping resources to deal with these threats. In the workplace many possibilities can be defined as a potential stressor, and should these threats be maintained over a long

period, the threats are sufficiently great magnitude, or there are many small stressors that build up, strain can occur. Similarly, the JDCS (amongst other models) states that should an individual experience a particular set of working conditions, strain can occur. Should these experiences last a period of time then chronic stress can lead to subjective and objective strain outcomes.

1b) Work Stress and Health & Well-Being

The pressures felt by employees at work can be extremely detrimental to health. For example the Japanese have a work ethic which means people regularly work excessively long hours and, in extreme cases, even sleep in the office. They even have a specific word, “karoshi”, which means death through overwork (Cranwell-Ward & Abbey, 2005). Perhaps the most compelling evidence to come out of the UK (and perhaps anywhere in the Western world) of the adverse affects that work stress can have on individual health is demonstrated via the Whitehall II study (Marmot et al., 1991). These influential authors took into account the JDC model of stress in the workplace (see **Chapter II, Section 1b.1**) to investigate the effects that stress (and in particular high demands combined with low levels of control) can have on an individual’s health and well-being. The study of over 10,000 participants was longitudinal in nature and found that individuals who experienced demands which are too great in comparison to control were more likely to develop a range of illnesses. Indeed, it was discovered that low control was particularly important – those individuals in jobs characterised by low control had higher rates of sickness absence, mental illness, of heart disease and lower back musculoskeletal pain.

The Labour Force Survey estimated that for the period of 2008 to 2009 throughout the UK, 415,000 people believed they were experiencing illness due to the level of workplace stress that they encountered. Also data taken from General Practitioners suggests that ill-health forms almost one third of all work-related health diagnoses, each case leading to an average 26.8 working days lost (all HSE, 2009). These figures illustrate

some of the reasons why stress in the workplace is currently receiving such attention from both academic and professional circles. The following section will provide evidence for some of the potential subjective, behavioural, affective and physiological effects that stress in the workplace can have on an individual.

1b.1) Subjective Experiences

Subjective stress experiences refer to those that are not considered medically dangerous, and yet self-reports from the individual would rate them as disruptive to their lives. Disruptive subjective health complaints such as headache or insomnia will impact an individual's ability to live their lives to the extent to which they may be used to. Chronic stress has been shown to be very strongly associated with long-term manifestations of these experiences, such as migraines and repetitive strain injuries, or more severe forms of depression and anxiety.

The transactional model asserts that stressors occur due to how individuals evaluate potential threats. Once an individual has appraised that they do not have the coping mechanisms necessary to deal with a threat, a potential stressor becomes stressful. Should these stressors become chronic and long-term, this is when serious physical and psychological strain can occur. The JDCS argues that high psychological demands in the workplace combined with low levels of social support and low decision latitude are likely to combine to lead to a stress reaction in an individual. Should these conditions occur for an extended period of time then chronic long-term strain can occur, with the potential for the following subjective and medical outcomes.

1b.1.1) Headache

One particular type of subjective experience which has been widely linked with chronic stress (occupational and otherwise) is that of headache and migraines. Houle and Nash (2008) argue that stress and the experience of headache are closely linked, with Martin et al. (1993)

distinctly showing that stress and anxiety are amongst the most commonly cited reasons for the development of headache. Numerous studies have found that stress both at work and at home can trigger attacks of migraine (Kohler & Haimerl, 1990). For example, Hashizume et al. (2008) conducted a study looking at stress and mood changes in Japanese participants over the 1-3 days before a migraine headache and included 16 participants who kept a headache diary four times a day over two weeks. Results concluded that the beginning of Migraine was preceded by psychosocial stress by three to four days, and so concluded that stress played an important part in the experience of Migraine. Similarly, research by Martin et al. (1993) and Martin, Lae & Reece (2007) emphasise the potency of stress as a headache trigger, with stress found to have a stronger effect on headache than any of anxiety, glare or noise.

1b.1.2) Insomnia & Fatigue

Sleep disorders and fatigue are an area of concern associated with stress-related problems. Common anecdotes often equate workplace stress with sleep disorders, but empirical research has also associated sleep disorders as correlated with sleep disturbances. For example, a study by Clint, Barry and Alexia (2008) utilised a self-report survey to look for any correlational relationship between stress in the workplace and work-related driver fatigue. The authors found that workplace stress alongside other factors was a significant predictor of fatigue-related driver near misses, and these two elements also predicted fatigue-related behaviour.

1b.1.3) Musculoskeletal Pain & Muscle Tension

Musculoskeletal reactions and muscle tension have often been spoken of as an outcome of chronic psychosocial workplace stress (Palliser et al., 2005), with research indicating that the risk factors to musculoskeletal pain are multi-faceted. For example, it is well documented that physically monotonous and repetitive work is associated

with increases in back, shoulder and neck pain. Along these lines Lundberg et al. (1999) found a relationship between work stress, muscle tension and musculoskeletal pain among supermarket cashiers. Additionally, several literature reviews have been conducted into the issue of musculoskeletal pain and job stress. For example, those performed by Bongers et al. (1993) and Hoogendoorn et al. (2000) identified low social support and monotonous work as risk factors for lower back pain.

1b.2) Emotional Distress

1b.2.1) Depression

It is thought that about 10% of people in the UK general population may experience depression (NHS Information Centre, 2007). Over the last decade and a half chronic psychosocial stress has been increasingly associated as a risk factor for depression (Siegrist, 2008). However, the link between work stress and depression has not always been found in research and findings have often been inconsistent. Reasons given for the discrepancy in findings include that studies often use differing measures of both stress and depression, and also it has been noted that studies have often failed to adequately control for other variables which may confound the association between stress and depression, such as prior mental health problems and family histories.

For example, an early study by Stewart & Salt (1981) investigated the relationship between stress and depression in a sample of 122 'normal' adult women and, although it was found that life stress was indeed associated with depression, it did not find the same relationship between *work* stress and depressive symptoms. Despite this apparent early blip in the research investigating occupational stress and depression, more contemporary recent research has found a very strong relationship between both life and work stress and depression. Chen et al. (2009) investigated the relationship between stress and depression in 843 employees over 8 different organisations and found that those with higher levels of workplace stress had higher levels of depression. Similarly,

Melchior et al. (2007) found that those participants with high job demands had double the risk of developing depressive disorder when controlling for a number of potential extraneous variables.

1b.2.2) Anxiety

Employees exposed to anxious conditions in the workplace may experience stress-related psychosomatic complaints due to its unpleasant emotional state (Addae & Wang, 2006). For example, Radat et al., (2008) found that stress and maladaptive coping strategies were found to be a major determinant of anxiety, and a further study was conducted by Wang (2006), who found that work stress was independently associated with anxiety disorders, thus indicating that it may play an important role in the aetiology of the disorder. Finally, Melchior et al. (2007) found that participants' exposure to high job demands (i.e. excessive workload and time pressures) doubled their risk of developing Generalised Anxiety Disorder.

1b.3) **Behavioural Manifestations**

It is often stated that the experience of stress in an individual's life can lead to unhealthy behaviours. For example, anecdotally it can often be heard that people smoke more when stressed, drink more alcohol when stressed, or that extreme stress can lead to the use of illicit drugs in order to help cope with the stress experienced. Indeed, in a qualitative study Ravalier and Biggs (2009) found that police officers and fire-fighters were more likely to engage in unhealthy behaviours such as reduced levels of exercise, more smoking and increased alcohol drinking when stressed (i.e. negative emotion-focussed coping strategies).

1b.3.1) Substance Misuse

While it is often reported that work stress is a main reason for individuals abusing substances, empirical support has not been consistent. For example, while an early study by Sadava et al. (1978)

reported that all of their measures of drug use were significantly related to stress, other studies have reported no such link for substance use as a direct response to work stress. For example Streffy & Laker (1991) claim that there is limited support for the argument that individuals with less efficient coping strategies are more likely to use substances in high-stress situations. However, animal studies, and in particular rat experiments, have shown that heightened levels of stressor increased drug taking activities. For example, Goeders (2002) showed that rats' sensitivity to certain drugs is enhanced in those exposed to stressors such as having their tails pinched, electric shock to their feet, and neonatal isolation.

1b.4) Stress and Disease

As with behavioural, emotional and subjective reactions to stress, you do not have to look far in order to find anecdotal and individual claims for the physiological effects that stress can have on the individual. For example, Dr Luisa Dillner states in *The Guardian* (2011) that financial stress is a cause of mental ill health, and in *The Sun* (2010) the actor Michael Douglas claimed he believed that stress had been a major determinant of his developing throat cancer. However, major longitudinal research projects such as the INTERHEART project (Rosengren et al., 2004; Yusuf et al., 2004) and the Whitehall II studies (Marmot et al., 1991) have also supported a link between stress and disease.

1b.4.1) Colds & Flu

The common cold is a major source of workplace absenteeism (Takkouche, Regueira & Gestal-Otero, 2001; Chartered Institute of Personnel Development, 2011a), and it is commonly believed that both life and work stress increases the susceptibility of individuals to infectious diseases. Both lab and field experiments have shown that the ability of the immune system to perform its tasks can be impeded due to stress (Cohen, Tyrell & Smith, 1993), effects that are believed to increase susceptibility to infectious diseases such as the common cold and

influenza. Similarly evidence from a more recent review by Cohen, Miller and Rabin (2001) discovered an association between psychological stress and antibody responses to immunisation, and a meta-analysis by Segerstrom and Miller (2004) of over 300 empirical articles found that chronic stress has a negative effect on immune system responses. Early viral-challenge studies by authors such as Broadbent et al. (1984) and Totman et al. (1980) are those in which individuals are exposed to viruses under controlled conditions having previously completed stress measures have provided only weak support. Despite much of this research providing only weak support, Cohen, Tyrell and Smith (1993) describe these studies as having inherent methodological weaknesses.

However, more recent studies have shown there to be a stronger association between stress and viral illness such as flu and the common cold than had previously been found. For example, results from a prospective study of 5,404 participants from the general population by Smolderen et al. (2007) found that the personality traits of negative affect and social inhibition, as well as perceived stress, all significantly predicted influenza-like illness. Similarly, Takkouche et al. (2001) studied the effects of stress on naturally acquired common cold via a 1-year prospective cohort study. Again it was found that psychological stress was a significant risk factor for the common cold.

1b.4.2) Cardiovascular Disease

The impact of psychosocial stress on cardiovascular disease has interested researchers for some time. Animal studies have often shown a strong correlation between chronic negative psychosocial environments and the maturity of cardiovascular issues such as heart attack and stroke (Kamarck et al., 2005). Epidemiological studies have also indicated that psychosocial stress can cause Coronary Heart Disease (CHD). One way in which this link may develop is by causing changes in risk factors to CHD such as overeating, blood pressure, smoking, and substance and alcohol misuse, as detailed earlier. In fact, evidence from the Whitehall II studies demonstrated that chronic workplace stress is a risk factor for complaints

which heighten the likelihood of developing cardiovascular disease (Marmot et al., 1991). However, probably the strongest evidence presented for the relationship between stress and heart attack comes from the more recent INTERHEART study (Rosengren et al., 2004; Yusuf et al., 2004). It was found that chronic psychological stress was very strongly linked to the development of CHD, and that the association between the two was as strong as those factors already known to impact upon CHD such as blood pressure and smoking.

1b.4.3) Burnout

Freudenberger (1974, cited in Sasaki et al. 2009) first established the link between chronic stress and burnout. Burnout is a potentially serious feature of chronic stress which can impair the effectiveness of employees (Collings & Murray, 1996). Burnout means that one is emotionally exhausted and while physical symptoms may exist in parallel, emotional fatigue is the core symptom. It is believed that once an individual's coping capabilities have been depleted there is no more plasticity left in order to recover, and as such persistent stress leads to burnout (Gorter, 2007). Essentially symptoms of burnout exist in three dimensions:

- Diminishing Accomplishment at Work – the employee has a negative view of their work and is displeased with their workplace accomplishments.
- Emotional Exhaustion – employees feel that they cannot give their all to work (Lloyd, King & Chenoweth, 2002).
- Depersonalisation – employee develops a negative, cynical attitude toward their work.

The association between burnout and stress has been shown in a number of contemporary studies. For example Lorenz, Benatti and Sabino (2010) found that susceptibility to burnout outcomes was increased in those with higher levels of stress in a sample of hospital nurses. Similarly a study by Hayes and Weathington (2007) of a sample of restaurant managers felt that burnout and stress were found to be significantly related. Burnout can therefore be associated to stress as one of the many major outcomes related to stress in the workplace. Burnout is a major problem because it seriously affects employees' work, and therefore individuals' working performance and efficiency.

The previous section has provided an example of some of the subjective, emotional, behavioural and disease-related outcomes that have often been associated with chronic stress in the workplace. The JDC(S) model of occupational stress argues that stress becomes strain via either the stress, or iso-stress hypothesis. One of the most convincing and wide-ranging arguments for the adoption of the JDCS as a tool for exploration of workplace stress was provided by the Whitehall-II study (Marmot et al., 1991). The study is longitudinal in nature, included the participation of over 10,000 civil servants, and is one of the most powerful studies of the relationship between stress, work and health. Indeed, the factors identified are being claimed to be causal in nature, with control and social support being found to have very strong effects on the stress outcome. Some of the impacts on organisations that stress outcomes can have are now evidenced.

1c) Organisational Costs of Stress: Financial

Stress in the workplace costs all organisations large and small a great deal of money each year. These financial costs come from a number of sources within the organisation, such as dealing with the stress-related illnesses as evidenced above, and compensation claims due to workers becoming ill and other adverse effects due to stress in the workplace. However, in addition to these obvious costs there are further expenses that are not explicitly seen as obvious outcomes. Indeed, it is estimated that 10% of the gross national product (GNP) lost in the UK per annum is due to job-generated stress outcomes such as sickness absence, turnover, increased recruitment and selection costs, in addition to medical outlays and compensation claims (Arnold, 2005).

Absenteeism, i.e. employees being frequently or habitually absent from work, is an obvious cost to employers which is often very hard to define monetarily. There are two general elements to absenteeism: frequency and duration, although frequency of absenteeism has shown to be the more reliable of the two monetary measures of the costs of absenteeism (Melamed et al., 1995). People who are having a hard time dealing with stress in their jobs are more likely to call in sick or have a day off (Westman & Etzion, 2001). In the United Kingdom the Chartered Institute of Personnel Development (CIPD, 2011a) found that stress was

the second most common reason for short-term sickness absence among non-manual workers. In addition, the HSE (2009) reported figures from the Labour Force Survey (LFS) that self-reported work stress, depression or anxiety accounted for an estimated 11.4 million lost working days in 2008/2009.

Should an individual become overly stressed at work then intention to leave, and eventually staff turnover, will increase. High rates of employee turnover can be expensive to a company because it raises costs, reduces overall efficiency, and disrupts other workers (CIPDb, 2011). The importance of selection and retention of new employees is also apparent; four hundred and twenty two human resource professionals surveyed (75% of those asked) in the USA identified selection and retention of new employees as one of their top five priorities (International Society of Certified Employee Benefit Specialists, 2007).

Organisations are increasingly being held responsible for employee stress due to the belief that they are doing too little to cut down on the stressful aspects of many jobs, possibly helping to explain the growth in corporate health and stress management programmes in the UK, USA and elsewhere. In the UK the number of employee stress compensation claims has been increasing. There are now hundreds of cases in the courts each year and those that were settled in and around the year 2000 resulted in compensation of an average of £250,000 each (Arnold, 2005).

To conclude, organisational stress has the potential to add both overt and covert costs to the running of any organisation. These costs come from a variety of areas, from litigation taken by employees against the organisation and absenteeism costs, to healthcare outlays and the money it takes to recruit new individuals. These costs are obviously detrimental to the running of any organisation, and in order to reduce these costs it is of obvious importance to the organisation that recognising the potential stressors could help in saving money. The next section of this literature review therefore explains some of the stressors that have been identified by researchers.

1d) Occupational Stressors

Throughout the literature, often utilising the theories and views above, copious stressors have been identified as having the potential to be present in everyday life. The following section of the background research will evaluate some of the issues which have been identified as stressful in the workplace. This will fit into the current study because it outlines some of the major areas which may come up during the process of the study, as such preparing the researcher for some of the potential outcomes during the data collection stage without either tainting the researchers' view or influencing what participants may identify as the stressors they face in the workplace.

Occupational stressors are aspects of the working environment that have the potential to cause poor psychological health or well-being of the individual. Contemporary research articles which have investigated the 'health' of the workplace have shown this to be multi-dimensional involving people within the organisation as well as the work environment (Regehr & Bober, 2005). Therefore it is understandable that numerous pieces of research have suggested that both of these aspects of the workplace can contribute to an employee's perception of stress at work, and as such adversely affect the health and well-being of individuals. In a review of the work redesign literature, Morgeson and Humphrey (2006) placed work characteristics into three major categories: motivational, social and contextual. Motivational characteristics relate to how complex the work is, with jobs being enriched with higher levels of complexity. Social characteristics reflect the wider social environment within which the job is performed, with contextual characteristics being the physical environment within which work is performed. Indeed it is within the context of these three characteristic types that the following potential stressors should be identified.

1d.1) Factors Intrinsic to the Job

These are two-fold: aspects of the job involving risk or danger to life as encountered, for example, by those in 'extreme' occupations such as

firemen, soldiers, and deep sea divers, and actual conditions in which a job is carried out, such as noise, lighting, temperature, hours and workload (Millward, 2005).

1) Risk and Danger

When an individual is constantly aware of potential danger they must maintain a constant state of arousal in order to deal with the situation should it move from being a potential danger to an actual danger. The resulting chronically high adrenaline levels as well as the muscle tension and respiratory changes are all seen as potentially threatening to long-term health (Arnold, 2005).

2) Working Conditions:

In addition to the obvious potential physical stressors that can cause problems for individuals at work (e.g. repetitive physical work, overly physical work, temperature, levels of light), uncontrollable noise has been shown to be particularly stressful for employees, and may lead to decreased task performance as well as lowered motivation at work (Wickens & Hollands, 2000). However, noise levels do not only apply to having extremely loud levels. These stressors can also be extended to low levels of noise, which has been associated with elevated levels of stress hormones and lower task performance (Evans & Johnson, 2000).

3) Technology

The implementation of new technology can require individuals to continuously adapt to new equipment, systems and ways of working (Arnold, 2005). While specific technologies have been used in order to relieve stress in the workplace (e.g. via workload reduction, increased communication etc), user adjustment to IT has been identified as a critical determinant of implementation success and stress in the workplace (Chen, Westman & Eden, 2009).

4) Work Hours and Workload:

It seems commonsense to suggest that those who work extreme numbers of hours are to have higher levels of stress in the workplace. An early example which shows the effects of high numbers of working hours

on stress-related outcomes was conducted by Breslow and Buell (1960). These authors conducted the study with light industrial workers in the USA, and found that those individuals who worked over forty-eight hours a week had twice the risk of death due to coronary heart disease than did individuals working in a similar environment for a maximum of forty hours per week. More contemporary publications have also supported such findings. Zadeh and Ahmad (2008) found that male employees working over forty hours had significantly different levels of psychological stress than those working fewer than or equal to forty hours, and a study by Kirkcaldy, Trimpop and Cooper (1997) with German physicians as participants established that those working in excess of 48 hours per week displayed significantly more driving accidents (although not work-related accidents), and they reported significantly higher levels of job-related stress than those colleagues working fewer than 48 hours per week.

Both work overload and work underload have shown to generate psychological and physical strain (Cooper, Dewe & O'Driscoll, 2001). Qualitative and quantitative workload can each have a marked effect on an individual's experience of stress in the workplace. Quantitative workload refers to the sheer physical amount of work that an individual has to do within their job, and the time frame in which this work must be completed (Narayanan, Menon & Spector, 1999). Quantitative workload has been shown to be related to high levels of strain, anxiety and depression, as well as job performance. Qualitative underload, i.e. having a lack of quality work to perform, has similarly been shown to add to employees' experience of workplace stress. This can be due to a variety of factors such as monotonous work and work lacking a challenge (Kelly & Cooper, 1981).

5) Shift Work:

Shift work can be a source of stress for individuals (Srivastva, 2010). Shift work comes in a variety of forms; for example times and lengths, and there are variations in the extent and frequency with which staff are required to change shifts (Arnold, 2005). Hoffman & Scott (2003) found that nurses who worked 12 hour shifts were more stressed than those who

worked 8 hour shifts, although Mitchell and Williamson (2000) found that shift length had little effect on individuals working eight hours compared to those working twelve.

6) Organisational Culture

The organisational culture within an organisation determines what its members do, how they do it, what they say about it and even what they think and feel about it. Therefore it determines what these individuals are allowed to do, what they are not allowed to do and their reactions to these things (Schabracq et al., 2001). As such, an organisation with a culture of being highly-strung and stressed will lead to many of its employees being so, which is why many organisations with high potential levels of stress (e.g. police, fire-fighters etc) adopt a culture in order to deal with these issues (Regehr & Bober, 2005).

1d.2) Organisational Role

Organisational role stressors are described as role ambiguity (when a person is unclear about how he or she fits into the organisation and is unclear about the expectations made of them), role conflict (when a person may have conflicting job requirements), and degree of responsibility.

7) Role Ambiguity & Role Conflict

Role ambiguity occurs when individuals do not have a clear idea of their work objectives, their co-workers' expectations of them, and/or the responsibilities that come with their job (Millward, 2005). A wide range of events can lead to role ambiguity, for example starting a new job role, being given supervisory responsibilities, or a change in organisational structure. The stressful outcomes found to be related to role ambiguity include lowered self-esteem, general life dissatisfaction, lowered job motivation, and higher intentions to leave the job (Siegall, 1999). Role conflict relates to an individual being torn by conflicting job demands, by doing things that they do not want to do, or doing things that the individual does not believe is part of their job (Chang & Hancock, 2003).

Research has indicated that role conflict can lead to reduced job satisfaction and higher anxiety levels (e.g. Siegall, 1999).

8) Responsibility

Research has tended to focus mainly on two types of responsibility in the workplace: that for people and that for 'things' (Arnold, 2005). Responsibility for people is more likely to lead to coronary heart disease than is responsibility for 'things'. For example, Iwanaga, Yokoyama and Seiwa (2000) investigated the effects of personality type in reacting to responsibility as a stressor, with results indicating that high levels of responsibility elicited psychological stress responses and increased heart rate in both personality types studied.

1d.3) Work Relationships

Social stressors, such as conflicts between co-workers and supervisors, and other social animosities at work have been more strongly associated with job strain than have task-specific stressors, yet they have been studied much less intensively (Dormann & Zapf, 2002).

9) Bullying

The topic of workplace bullying with respect to stress in the workplace has attracted increasing attention over the last 15-20 years. However, it is still a relatively new area of study. Research suggests that bullying is potentially a major risk factor for stress. For example, results using self-report measures (Agervold & Mikkelsen, 2004) indicated that higher levels of psychological stress, mental fatigue, and increased likelihood to take sick leave were all associated with exposure to acts of bullying. Likewise, Hansen et al. (2006) found that respondents who reported themselves as having been bullied at work had lower social support from colleagues and supervisors, and reported higher levels of depression, anxiety and stress at work.

10) Peer Support

The buffering effect of peer support for stress in the workplace is an essential part of the revised Job-Demands-Control-Support (JDCS) model of occupational stress (see **Section 1b.1**). According to the JDCS adequate

peer support is an important variable in individuals dealing with stress in the workplace, and there have been numerous studies supporting these claims, with the claims not solely being supported in the workplace. For example, Lowry and Stokes (2005) conducted an exploratory study testing the effects that adequate peer support has on individuals with Posttraumatic Stress Disorder (PTSD) symptomology using a student paramedic sample and found that while adverse peer support did not add to stressors faced in their jobs, positive peer support had a reinforcing effect. Similarly a randomised controlled trial conducted by Peterson et al. (2008) indicated the positive effects that peer support had on individual experiences of stress at work.

11) Organisational Support

The importance of having good organisational support for individuals in the workplace is obvious. A lot of recent research into stress in the workplace has focussed on the organisational support that individuals receive in order to deal with stress, and although it is impossible and probably detrimental to business and individuals to eliminate stress entirely, people can learn to manage stress. For example, Carlan and Nored (2008) found that stress levels decreased in a sample population of police officers when formal action was taken against such stress.

1d.4) Career Development

12) Development Conflicts

The discrepancy between career goals and actual achievement relative to life stage has been found to be a significant source of stress. For example, Buboltz (1997) investigated the relationship between career development task mastery, and career development, and levels of occupational stress, strain, coping, and job satisfaction, with regression analysis results indicating that career tasks were moderators of the stressor-strain relationship. This indicates that the more control an individual has over their career development (and as such the more likely

they are to achieve career goals/tasks), the less psychological stress they experienced.

The previous description of the different types of stressor is important to the study because it will allow the profiling of stressors later in the project (for example, see results **Chapter 7 Parts 1 to 4**). Indeed, a recent meta-analysis and pathway analysis conducted by Yu et al. (2007) of over 450 studies demonstrated that subjective stress (individual cognitions and feelings caused by events) has a significant, direct influence on health. It also found that some objective stressful events, such as examinations, high workload and military service, are inevitable stressors and as such the strain outcomes can eventually occur. Therefore these descriptions provided will play an important part in both identifying the stressors that participating individuals in the current study face, and in attempting to find interventions that may help in dealing with these stressors. However, as mentioned above this review is not assumed to represent every stressor that individuals in the workplace may face. The next section of the project will evaluate the different methods that are used most widely to ameliorate and/or alleviate individuals' suffering, or with the potential to suffer from, stress in the workplace.

1e) Managing Stress at Work

As previously discussed in a critical manner, organisational stress affects the physical and psychological well-being of individuals, and as such has the potential to alter the effectiveness of organisations. Several reviews have been conducted of interventions which were designed in order to reduce occupational stress and the general findings of such reviews are that occupational interventions are effective. For example, van der Klink et al. (2001) looked at whether stress interventions in organisations are effective, as suggested by many previous qualitative reviews. Forty eight studies were included as being appropriately designed and as having used reliable measures, and the meta-analysis found reliable evidence that employees benefit from stress-reducing interventions.

Stress Management Interventions (SMIs) were put into one of three classifications in a framework developed by Ivancevich et al. (1990). The model suggests that interventions can be classified into interventions which focus on the intensity of stressor, how the individual considers the situation, or the mechanisms available for coping with the outcomes of the stress. These three methods of intervention have been conceived as primary, secondary and tertiary interventions:

1e.1) Primary Interventions

There is an increasing amount of scientific literature investigating the effects of organisational-level interventions for work-related stress (Levi, Sauter & Shimomitsu, 1999). Nonetheless organisationally-focussed interventions are still utilised much less than either secondary or tertiary approaches (Jordan et al., 2003). Primary, or organisational-level, management stress interventions are designed to deal with the source of the problem by changing the design, management and/or organisation of work (Cox, Griffiths & Rial-Gonzalez, 2000). In doing this primary interventions are proactive in identifying and reducing the stress hazard at the source, while also easing the employee stress burden. These methods target the actual cause of the workplace stress, and as such are claimed to be an effective stress reduction technique over the long term. The organisation is seen as the 'generator' of the stress-related risk to health (Cox et al., 2007), and as such risks should be dealt with at the source. Therefore primary stress management interventions include techniques such as job redesign in order to modify workplace stressors or increasing workers' autonomy (Ongori & Agolla, 2008).

Examples of primary interventions include job redesign, changes in the pace of work, and enhancing social support (Lamontagne et al., 2007). Many papers exist which indicate that primary interventions are the most effective at reducing workplace stressors. Indeed, research produced by Ongori and Agolla (2008) suggest that occupational stressors should be fought at their infancy, and due to the nature of primary interventions they are the best at doing so and as such, if these strategies are taken

seriously, then stress in organisations will be reduced. Also, Lavoie-Tremblay et al. (2005) utilised primary stress intervention approaches (while employing participative methods) in order to improve management style, improve working conditions, reduce rates of both absenteeism and turnover, and reduce overall levels of stress. Similarly, the learning environment within the workplace had been found to be improved in primary intervention studies conducted by Fricke (1983) and Mikkelsen and Gundersen (2003), and Halbesleben et al. (2006) utilised Action Research methodologies to improve employee participation and burnout outcomes of stress.

1e.2) Secondary Interventions

Secondary stress management interventions, those which are most commonly utilised in organisations, involve helping the individual to be able to cope with their workplace stress (Giga et al., 2003), thus dealing with the symptoms of stress before they become health issues. They also serve the dual purpose of identifying the current stress factors and to help individuals to cope with future stress (Ongori & Agolla, 2008). Examples of secondary SMIs include (Richardson & Rothstein, 2008) cognitive-behavioural skills training to help cope with the thoughts and emotions when managing stressful situations; techniques designed to help employees reduce aversive physiological reactions to stress such as meditation and relaxation; and other techniques such as time management and goal setting.

Several studies and meta-analytical reviews of secondary stress management intervention effectiveness have taken place over the past two decades. One compelling review of the literature via the British Occupational Health Research Foundation (BOHRF, 2005) suggested that secondary stress management interventions may at best have a modest or short-term impact on a range of variables associated with individual stress. A more recent review by Richardson and Rothstein (2008) included 36 experimental studies with a total sample size of 2,847 participants. The findings suggested that the type of intervention (e.g. primary,

secondary or tertiary) played a moderating role, with cognitive-behavioural programs consistently finding larger effects than the other types of intervention. Similarly Flaxman and Bond (2010) demonstrated that a cognitive-behavioural approach to stress management resulted in a significant reduction in employee stress over a six month period. Despite these findings it was found that relaxation techniques were the most often used (possibly due to the ease of implementation and the low cost associated with this type of intervention), whilst organisational interventions continue to be scarce. However, the study included no data on how long the effectiveness of the interventions would continue for. Furthermore, Ongori and Agolla (2008) conclude that organisational management must introduce various interventions which manage the actual occupational stressors, as opposed to how individuals react to the stressors. Therefore these traditional (secondary) approaches are considered by many as not enough to manage stress. Examples of secondary stress management techniques include a focus on acquiring problem-solving skills, reducing negative coping styles, and developing self-awareness in relation to the stressors (BOHRF, 2005).

1e.3) Tertiary Interventions

Tertiary interventions are designed for use once an individual's health is adversely affected by stress by providing access to mental health professionals (Arthur, 2000). As such they are rehabilitative for individuals who are already suffering from the effects of stress. Interventions include counselling and employee assistance programs (EAPs), consulting a stress management expert or mental health professionals to assist employees to cope with stress (Ongori & Agolla, 2008). EAPs are an example of widely-used tertiary interventions. They take a systematic approach to dealing with stressors whether they are from work or based elsewhere (Bhagat et al., 2007).

When correctly implemented, EAPs can be powerful and effective institutional mechanisms (Yu, Lin & Hsu, 2009). A demonstrative example of the potential that EAPs have in organisations is provided by Stetzer

(1992), where the author notes that certain medical costs were vastly reduced in Campbell's Soup Company in the USA when mental health treatment and counselling were introduced to its EAPs. Similarly, Sciegaj et al. (2001) presented important figures showing that 92% of Fortune 500 firms offered employee assistance. However, systematic evaluation of EAPs is quite rare. Quite apart from the methodological and measurement problems associated with measuring human and financial outcomes, there is a notoriously poor uptake of employee assistance opportunities (Millward, 2005). One such systematic evaluation, however, concluded that there was strong evidence for the use of cognitive behavioural therapy (CBT) as a tertiary response to stress when individuals have succumbed to its effects. CBT was found to have the strongest influence as a tertiary technique, and was found to be used more often than schemes to impact upon job role or increase employee participation (BOHRF, 2005).

1e.3.1) Why Primary Interventions?

Many stress management approaches have been implemented to help people cope with increased stress in the workplace (i.e. secondary approaches). Although these have realised some benefits, they have not resulted in the desired outcomes and the level of stress experienced by workers has continued to rise. One strong limitation as to the use of these approaches is that they do not alleviate stress at the source of the problem, or help to prevent stress at the point at which it occurs (Barrios-Choplin, McCratty & Cryer, 1997). The 'conventional' person-directed approach (i.e. secondary and tertiary) is predominantly reactive and biased, portraying an impression that the problem of stress in the workplace lies solely with the employee as an individual as opposed to the organisation and the way that it works (Giga, Cooper & Farragher, 2003). During a review of the research evaluating organisational stress interventions, Kompier and Cooper (1999) stated that individual-focussed interventions concentrate on decreasing the impact of stress on employees while making no attempt to reduce the levels of actual

stressors from the workplace. It has also been concluded that 70% of said research included some degree of secondary intervention (Giga, Cooper & Farragher, 2003). Kompier and Cooper (1999) state that there are a few main reasons as to why individually-focussed approaches are often preferred to primary interventions:

- I. It is easier for management to blame the personality and lifestyle choices of employees than to take responsibility for dealing with stress. Therefore secondary and tertiary reactionary techniques are ideally placed and suited to the needs and beliefs of the management.
- II. Organisational psychologists often concentrate on subjective and individual differences. As such these psychologists and 'experts' will utilise the stress reduction techniques that suit their methods of inquiry, without further investigation of other issues.
- III. Organisations change at a frantic pace and it is therefore be difficult to introduce systematic interventions within them. Organisations must change and adapt on a near-daily basis due to the pressures put on them, both internally and externally. As such, methods of working and organisational outcomes and priorities will change constantly, meaning that a group's ability to change their stress-reducing practices within these dynamic organisations is going to be challenged.
- IV. The lack of definite empirical evidence on the costs and benefits of stress interventions. Due to this lack of explicit, clear-cut evidence on the effects of primary changes on organisational outcomes such as productivity and cost, management have very little to convince them to make primary stress-related changes.

However, there are now increasing calls for a paradigm shift, away from viewing work stress as a subjective and individual problem to one that needs to be assessed and dealt with by organisations as a whole. This new paradigm views it as the management's job and responsibility to adapt to any changes in its organisation in order to empower employees to manage their occupational stress effectively (Ongori & Agolla, 2008).

Both the transactional definition of stress and the JDCS theory of workplace stress suggest that stress is, rather than being 'blamed' on the individual, due to a certain set of environmental and personal characteristics. However, this is not the premise that follows the use of

secondary and primary workplace stress interventions. Both of these approaches experience stress as the result of problems within the individual, e.g. secondary approaches often see the problem as the individual being unable to cope with the working environment and therefore seek to enhance individual's ability to deal with stress, and tertiary interventions look retrospectively at the problem once the employee has experienced a strain reaction. However, primary approaches follow the lead as set by the transactional and JDCS models, looking at changing the working environment as opposed to the individual, and thus removing the sense of blame from the individual.

1f) Participatory Workplace Research

As analysed above in **Section 1e.1**, primary intervention studies make attempts at changing the organisational environment and thus lessening stressors at the source from which they emanate. In conducting these primary prevention studies increasing numbers of researchers are employing participatory change processes (Trudel et al., 2009; see **Chapter IV, Section 2** for an exploration on organisational change).

Participatory approaches to organisational research create the knowledge required in order to design and implement action (Cornwall & Jewkes, 1995). Participatory research therefore allows individuals to discover their own solutions to problems that they may encounter - they encourage a 'bottom-up' approach which leads to 'local' perspectives toward and knowledge of work phenomena. In participative research the main researcher who elicits a research program is committed to sharing power with those who are taking part, and thus ensuring that the research is conducted both for the outcomes of participants and researchers (Diaz & Simmons, 1999). Northway (2010) argues that participatory research is neither a research design nor a methodology, and both quantitative as well as qualitative methodologies (see **Chapter VI, Section 1a**) can be used in order to fully appreciate the use of a participative approach.

Participatory research differs from 'conventional' researchers in a number of ways. In more traditional research projects it is the researcher

who designs, carries out and analyses the research whereas participative approaches ensure that at least *some* control over the process lies in the hands of the participants (Diaz & Simmons, 1999). Northway (2010) recognised that describing a piece of research as 'participatory' can mean different things for different researchers, and so suggested a number of common features which can help to distinguish between participatory and other research approaches:

1. "Centrality of the participant to the research" (pp. 175). The views, thoughts and opinions of the participant are most important, rather than researcher knowledge or expertise. Therefore the differing priorities of individuals need to be appropriately managed throughout the process.
2. "A commitment to changing the balance of power" (pp. 176). Participants need to be empowered through the process, and thus the power balances within the participating population are challenged. According to Cornwall and Jewkes (1995) the issues of power and control are essential in participative research in that it allows active participation and choice.
3. "A different role for the researcher" (pp. 176). In traditional positivist studies the researcher takes a detached, objective position throughout the work. In participatory research however the researcher takes an active role as a committed participant and facilitator throughout the process.
4. "Participation in all stages of the research process" (pp. 177). Participatory researchers attempt to include participants in every stage of the research process, from research question definition and data analysis to the implementation of the research outcomes. Despite this being the ideal situation, it is often not attainable for a variety of reasons and so the amount of participation can alter and change throughout the research process. Indeed it is this that Cornwall and Jewkes (1995) describes as the most striking difference between participatory and traditional research.
5. "The production of 'useful' knowledge" (pp. 177). Due to the participatory nature of this type of research, including the bottom-up approach often utilised, the outcomes will be useful for the employees and overall organisation as a whole.
6. "A commitment to action" (pp. 178). Traditional research has often meant a marked gap between the usefulness of research outcomes to the researcher in comparison to

the usefulness for the researcher. However participative research is different - participants create new knowledge while eliciting action and change strategies.

Despite the elicited differences between traditional and participative research intimated by Northway (2010), it is clearly acknowledged that a variety of combinations of these approaches can occur during research which is still regarded as participatory. Indeed Diaz and Simmons (1999) argue that very few research studies which are described as participatory fulfil each of the criteria set out above, and yet are still assumed to be participatory. These approaches should therefore be viewed more broadly than how they are discussed by Northway (2010).

However, the literature on the effectiveness of employee participation within research has been varied (Dejoy et al., 2010). For example Dalgren and Gard (2009) conducted a meta-analysis looking at studies which utilised primary-focussed organisational stress reduction studies. Analytical outcomes found that participation in primary organisational change initiatives were effective in the improvement of organisational health and effectiveness. Participative approaches were also found to create learning among participants. Similarly Dejoy et al. (2010) implemented a participative approach to employee problem solving in 11 shopping stores in the USA, with 10 further stores acting as controls. It was found that the worksites which received the participatory interventions fared 'better' than the control stores, and even with negative external organisational pressures impacting upon organisational effectiveness the participative interventions appeared to buffer the negative effects of these pressures.

Despite this, not all participatory approaches have been shown to be completely effective. For example Kobayashi et al. (2008) conducted a participatory approach in which 321 participants located through particular departments of a manufacturing organisation took part in participatory research in order to reduce job stressors. It was found that significantly positive differences in psychosocial stressors were found for the female workforce only, with no significant change discovered amongst the male population. Despite this the research did also find that

departments where greater than 50% of employees took part in the participative research improvements were most prominent when compared to control groups, thus arguing that participatory approaches are effective at improvement of psychosocial job stressors.

Participatory approaches have therefore generally been shown to be effective tools for the improvement of the health and wellbeing in the workplace. The approaches take individual knowledge and expertise in account when developing a change methodology, meaning that individuals face a different role to that encountered in traditional research. Arguably however the most important aspect of participative research is that the outcomes gained from the research are advantageous to both the researcher and the participant in that changes are implemented in order to improve a particular situation. With respect to stress management interventions, participatory approaches are often implemented in order to ensure organisationally-focussed changes are implemented. As such primary stress management interventions and participatory approaches have the potential to be strongly linked in research (see **Chapter VI** onwards for how the two are linked in the presented research).

This background chapter of the presented thesis has evaluated the impact that work stress outcomes can have on both individuals and organisations. Indeed compelling studies have shown that individual health and behaviours can be adversely affected by the experience of chronic stress, which in turn impacts upon organisational effectiveness. In order to combat these outcomes, many organisations have stress management programs aimed at either the improvement of the organisation, or the improvement of organisational coping strategies. Primary organisational approaches are those which focus on improvement of the organisation, and are often linked with the use of participatory organisational approaches. Indeed the presented research takes a primary organisational improvement viewpoint while utilising a participatory approach for the improvement of employee health and wellbeing (see **Chapter VI** for methodology). As such a more thorough

understanding of organisational change processes is presented in the next chapter, as well as facilitators and inhibitors of organisational change.

Chapter IV:

Organisations & Organisational Change

Chapter IV: Organisations & Organisational Change

While **Chapter II** was a critical discussion of some of the psychosocial stress literature and **Chapter III** looked at the costs of stress as well as how it is managed within organisations, the current chapter will examine organisations and organisational change. Therefore to begin with a discussion of the typologies of organisations is critiqued against the concept of the learning organisation. These sections are a necessity because they allow a further understanding of the organisation taking part in the presented research, as well as some of the barriers and facilitators to developing and implementing organisational initiatives. Finally soft systems and hard systems methods of change are analysed in order to ascertain to possibility of change within an organisation as conceptualised by Handy and others, as well as potential areas of employee resistance to this change and methods to overcome some of this resistance.

1) Defining Organisations

Organisations as we know and conceive them presently are relatively recent in the history of mankind, and even in the late nineteenth century there were few organisations of any size or importance, and no labour unions, no trade associations and few large businesses, non-profit organisations or government agencies (Daft, 2010). Organisations are hard to see and, other than the tangible outsources of organisations such as tall buildings and employees, whole organisations are vague and abstract to many and may be located in more than one geographic area. However, we are touched by organisations every day and have been so ever since birth, e.g. via hospitals and schools (Daft, 2010).

1a) Types of Organisation

A number of classifications of the types of organisation have been developed. These classifications are useful because they provide broad overviews of the sort of variation that exist between organisations (Brown, 1998). One of the most well-known typologies was conceptualised by

Charles Handy (1985), who adapted earlier work by Harrison (1972). While the main purpose of Handy's work was to illustrate different types of organisational culture, it is also very adept when discussing organisational structure (Salaman, 2000). This typology of organisational structure, more so than organisational culture, is important within the context of the current project as it allows the participating organisation to be depicted adequately, putting it into the context of the thesis.

In 1972 Harrison suggested that there are four main types of organisational culture, and termed them 'power', 'role', 'task' and 'person'. Charles Handy's re-classification describes four similar organisational structures/cultures, each with its own characteristics and the ability to exist along with others (Kane-Urrabazo, 2006). In Charles Handy's re-working of Harrison's original ideas, he made reference to Greek mythology while also describing the four types using simple pictograms (Brown, 1998). This simple method of conceptualising organisational typology has influenced the way in which researchers and practitioners understand the internal workings of organisations (Brown, 1998).

1a.1) The Power Culture

An organisation operating with a Power Culture has a single source of power from which 'rays' of influence spread throughout the organisation. These 'rays' are all interconnected by strands which represent specialist strings. The interconnectivity of these strings allows the culture type to be represented as a spider's web (see *Figure 2*). Handy likens the power culture to the Greek God Zeus, with Zeus being an omnipotent leader of the Gods on Mount Olympus (Brown, 1998).

Figure 2: The Power Culture A spider's web, with the majority of decision and power disseminated from the 'leader' of the organisation outwards

The central power source is usually the owner or president of an entrepreneurial organisation where trust and personal communication are both important characteristics, and there is usually an absence of

bureaucracy (Salaman, 2000). Therefore employees function with few rules, policies and procedures (Kane-Urrabazo, 2006), although this means that employees need to share the same vision and values as those in charge of the organisation.

The greatest strength of this culture is its ability to react quickly to changes, but a large drawback is that their success depends largely upon the abilities of the person or people at the centre of the organisation recognising the need for change. Therefore, should those at the top of the hierarchy (or the centre of the web) not recognise the need for change quickly, or the change implemented is inappropriate, it could cause problems for the whole of the organisation. Additionally, size within the organisation can be a problem when one of the strands of the web breaks (Brown, 1998). As such organisations with a power culture are threatened by the increasing size of the firm and the death or departure of central figures (Salaman, 2000). This could mean that the organisation is spread over too large an area for recovery and organisational effectiveness and efficiency could be greatly affected. However, these organisations are usually tough and abrasive and more interested in the ends than the means used to get there. Employees who are confident about the use of power and unconcerned about taking risks to find the end results will often thrive, but failure to recruit appropriate personnel may lead to lowered morale and high levels of middle management turnover. Therefore it is seen that there is no place for the individual if they do not 'fit' the organisation.

1a.2) The Role Culture

Handy depicts the role culture as a Greek temple, the personification of a classic bureaucracy which acquires its strength through functions, specialities, rules and procedures. These speciality functions can be thought of as a number of pillars which are co-ordinated and controlled by a small number of senior executives, e.g. represented by the roof above the pillars (Brown, 1998). Handy described this culture

as the Apollo culture, after the God of harmony and order, which is how these organisations are run.

Figure 3: The Role Culture A hierarchical bureaucracy which deals with specialist functions.

The role culture is exemplified by the importance that is placed upon rules, procedures and job descriptions. The cultures therefore thrive best in environments which are neither dynamic nor unpredictable, and those environments which the organisation has some control over. Also technical expertise is the most important aspect of this culture rather than novelty, with the many civil service and oil industry organisations being cited as examples of role cultures (Brown, 1998).

The main issue with role culture is that they can be very slow to react to change, a serious problem in a world where it is considered vital to be able to change and adapt quickly in an ever-competitive and dynamic work area. However, for many individuals who value security and predictability in the workplace the role culture can be highly reassuring, while for those who are ambitious and power-orientated these cultures can be frustrating.

1a.3) The Task Culture

At its best this should be a team-culture which is highly flexible, adaptable, and with individuals able to make their own decisions on their work. Mutual respect for fellow employees is based on ability in the workplace rather than age or societal/workplace status. The focus, as the name suggests, is on a particular job or function (Kane-Urrabazo, 2006). Therefore getting the job done is essential, meaning that flexibility and adaptability within the organisations are integral, and it aims at assembling the right employees with the right resources so that the job can be completed (Kane-Urrabazo, 2006). Handy described this as the Athena culture because Athena is known as the problem solver and likened the culture to a lattice or net in which there is close liaison

between departments, functions and specialities which are represented by the 'spots' within the lattice as depicted in *Figure 4* below.

Figure 4: The Task Culture Flexible and adaptable with individual autonomy.

In environments where there is a very competitive market, such as Advertising Agencies and research groups, where product spans are short and constant change and innovation is necessary, these cultures are often very successful (Salaman, 2000). Since workplace groups have a common purpose there is often a sense of enthusiasm and shared working commitment. However, the problems with these cultural structures are equally as strong as the potential advantages. Due to the highly dynamic and ever-changing nature of organisations which have these cultures, they do not usually build up a great depth of employee expertise. Additionally they are heavily reliant on the quality of the people involved in the work. Also, when tasks go wrong and control needs to be exercised from the centre of the lattice, or the head of the organisation, it can easily revert to a role or power culture, where rules and procedures are passed down from those in charge, possibly leading to a decline in morale (Brown, 1998).

1a.4) The Person Culture

This is the most uncommon of the four identified cultures. Any organisation with a person culture exists solely for the individuals that comprise it, as opposed to for the intended outcomes of the organisation, and as such is represented by Handy's model as a cluster in which no individual dominates (Brown, 1998). The person culture focuses on the individual with its main purpose being to satisfy the needs of individuals, and the organisation itself is secondary to individual self-fulfilment (Salaman, 2000). The organisation develops when a group of people decide that it is within their own interests to assemble and organise as a collective rather than on an individual basis, as is often the case with barristers, doctors and architects (Brown, 1998). Therefore within these

cultures individuals decide on their own work allocation, with rules and coordinative actions between employees of little significance. The God of wine and song Dionysus is used to describe the person culture because the individuals making up the organisations are in charge of their own destiny, as opposed to being instruments of any 'God' which could rule the culture.

Figure 5: The Person Culture A group of individuals converge as a collective. Exists solely for the individuals that comprise the organisation.

These cultures are attractive to individuals who would like to operate on a freelance basis but within the security of an organisation. However, this is not always possible and conflict can arise when individuals attempt to operate according to a person culture whereas the organisation is essentially that of a role culture (Salaman, 2000). Individuals have near-complete autonomy and influence and power is shared on the basis of expertise (Brown, 1998). Also, due to the networks available of peers with differing expertise often in the same area, members of the organisation have a good support network and flexibility. However, due to no (or few) individuals holding absolute power the organisation can be hard to effectively manage. Alongside this problem it is difficult to bring about changes in organisational and individual behaviour without resorting to extreme measures due to the lack of management.

Charles Handy's work on organisational culture has been influential to organisational management and researchers alike. For example, a review of the theory in 1998 by Andrea Dragon describes the theory as being highly significant, even describing it as seemingly predicting the trend in changing organisational typology over time. Despite the conceptualisation being described as focussing on organisational culture, the work is equally as important and influential in helping understand types of organisation and thus put research or management perspectives alike into context. Therefore the four 'cultures' (or types of organisation) are an important tool, particularly for contextual

purposes. As previously stated, the organisation within which the current study is undertaken is a public sector company, with Handy's conceptualisation providing a contextual understanding of it (see **Chapter V, Section 2b**).

It is acknowledged that there is very little critique of Handy's conceptualisation of the organisational type and culture. While one such criticism of the work is that the idea of organisational culture is not necessarily equitable to types of organisations (e.g. in work by Boddy [2008] types of organisation and organisational culture typologies are kept separate from each other), the approach to see the two as equitable in Handy's work has been successfully integrated by business and management authors, scholars and practitioners (Brown, 1998).

Discussion Box 5: Handy's Typology, Learning Organisations and Psychosocial Stress Intervention in the Presented Study

As **Chapter V, Section 2b** presents, the organisation which took part in the presented study is clearly represented by the 'Role' culture as described by Charles Handy. These organisations are described as essentially hierarchical in nature in which many layers of management are present. Therefore seeking methods to get 'through' these gatekeepers are essential to the reduction of management resistance. Methods to reduce such resistance include adequately 'selling' the idea, including the potential impact of the work, to management. Similarly gaining top-level management buy-in could reduce uncertainty, and building relationships early in the process with key stakeholders throughout the organisation can 'open doors'. While a learning organisation (**Section 1b**) may indeed embrace each of these artefacts, it is argued (Lampel, 1998) that a typical hierarchical organisation (and therefore one represented by the 'role' culture) cannot be a learning organisation. Therefore in order to ensure a successful participative (**Chapter III, Section**

1b) Learning Organisations

As a contrast, or perhaps an addition to, Handy's conceptualisation of organisational structures and cultures the concept of 'Learning Organisations' will be discussed and evaluated. In organisations, those that are strongest and most successful are the ones that are best able to change in response to their environments, with these learning abilities critical for organisational growth (Wilson & O'Connor, 2000). The term 'learning organisation' was originally popularised by Peter Senge in the 1990s, with Garvin (1993) penning the following definition:

"A learning organization is an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behaviour to reflect new knowledge and insights" (pp. 80).

A learning organisation therefore embodies the degree to which an organisation is committed to challenging and henceforth changing the fundamental beliefs and practices which are encompassed in its culture (Liao, 2006). An important feature of learning organisations is that they value individual development, allowing continuous transformation based on experiential learning. Organisational learning is a deliberate process throughout the business, rather than being an accidental group of interconnected activities, thus individual learning and organisational development is planned and interconnected (Mullins, 2008).

According to Davis and Daley (2008), the concept of the learning organisation is now very well established, although there is a lack of any consistent method used to research the concept. However, Lampel (1998) has identified 5 basic principles which should be followed in order for an organisation to be described as a 'learning organisation':

1. Learning organisations learn from both successes and failures. Indeed failures can be as important, if not more so, than successes when learning from planned activities. Therefore failures are not

buried but learned from, with the organisation realising that some of the costs of failure can be recouped simply by learning from it.

2. Learning organisations target areas which require improvement, and use lessons and knowledge obtained throughout the organisation to improve upon these areas. Therefore formal interactions between staff, role rotation and multifunctional teams can help improve the organisation.
3. Learning organisations understand that those at the front line, rather than management and others who are removed from the problems, often know more about activities and processes and how they can be improved. Therefore it is these individuals who can be learned from when change is necessary, and 'mobilising the knowledge' of these individuals is a crucial element of the learning organisation. Knowledge sharing is done so via an 'open door' management structure, allowing information to flow upwards easily.
4. Learning organisations are constantly seeking methods to change and improve, thereby not resting on its laurels. In other words there is always room for improvement, even in an area thought to be already efficient. New technologies, personnel or practices can all allow the evaluation of systems and redesign of parts of the organisation.
5. Learning organisations learn from a number of sources, including those outside of the organisation it's self. They learn from competitors, suppliers and customers in order to improve the working of the business.

The learning organisation is therefore the opposite of the atypical hierarchical organisation and encourages employees and management alike to have open and encouraging communications. Indeed, Lampel (1998) goes on to argue that the typical hierarchy of organisations of old is replaced by collaboration and participative working.

1b.1) Critique of the Learning Organisation Concept

There are a number of concerning aspects of the learning organisation concept. For example, Garvin (1993) argues that there are three critical features of the concept which need resolution in order to ensure fully effective implementation within an organisation aspiring to 'learning' status. Firstly, as with many constructs and structures within organisational/business psychology, settling on a fixed definition of what a learning organisation is done so with difficulty (Wilson & O'Conner, 2000). Despite this, it is the employees within the workplace who are the main theme in many accepted definitions. The development of these members is given the highest priority in a learning organisation, and should therefore form a key aspect of any definition (Desta, 2009). Secondly, Davis and Daley argue that, as of 2008, while there are a large number of studies relating to organisational learning, and in particular why learning matters, few provide empirical evidence and/or advice as to how to turn make a 'learning organisation'. There is therefore little empirical evidence as to how a hierarchical organisation for example can become a learning organisation. Finally, it is very difficult to empirically measure (and therefore evaluate) whether an organisation is 'learning', or whether becoming a learning organisation has improved upon organisational performance. Studies tend not to address the impact of the various elements of the learning organisation, nor do they assess the overall impact of the approach (Davis & Daley, 2008). Finally Harrison (2000) argues that simply having a number of individuals learning within an organisation does not necessarily equate to a learning organisation. Instead, adequate systems and processes are required in order to turn this individual learning into organisational learning.

Among the advantages of being a 'learning organisation', its proponents suggest that it should enhance individual, team, and organisational learning which, in turn, yield performance improvements (David & Daley, 2008). For example in a case study noted by Wilson and O'Connor (2000), described as the 'Stumbling Stone' project, the main goal was to improve effectiveness by involving workers in a quality

improvement drive. Individual employees worked together to identify the constraints associated with work in the organisation as well as methods of developing interventions. The authors reflected upon the small improvements and removal of barriers to work as being directly responsible for productivity increases leading to continuous improvements and learning at both individual and team levels. Learning organisations provide training and career development for individuals, who can also be urged to learn better methods of working and help to understand and solve organisational problems (Shieh, Wanh & Wang, 2009). Finally, Lampel (1998) argues that the advantages for the learning organisation are not just efficiency and productivity increases, but an ability to adapt to the dynamic nature the organisations find themselves in:

“the improved capabilities conferred by such organizational learning do not result merely in better products and higher profits; they also increase the ability of the organization to take advantage of rapidly changing external conditions” (pp. 215).

One last point to note is how the literature (e.g. Lampel, 1998) seemingly denounces hierarchical organisations (those with a 'Role' culture) as not being able to be learning organisations. This would therefore suggest that these two ideals are completely separate and mutually exclusive of each other. Contrarily however it is clear that elements of organisations consisting of the Power culture or the Task culture could be seen as learning, with these types of organisation seemingly learning from experience and reacting to change as necessary. This point would therefore argue that these aspects of Handy's conceptualisation are not mutually exclusive from that of the learning organisation, and these are points which need to be taken into account within the presented research.

2) Organisational Development & Change

Organisational development (OD) is a method by which organisational changes across the structure, technology, task and/or people can be implemented by focussing on the *human* and *social* implications of these elements in organisations. Organisations are modelled as social systems and organisational development refers to acts or processes which advance or promote the growth of these systems. (French, Bell & Zawacki, 1994). As such organisational change can be defined as:

“a powerful set of concepts and techniques for improving organisational effectiveness and individual well-being” (French, Bell & Zawacki, 1994, pp. 1)

Organisational development therefore denotes the description of a process of planned change which has the potential to comprise of many elements. The desired change needs to be long-term, planned and system-wide which requires a sustained, complex and multi-faceted change. OD targets work-related groups of individuals and inter-group make up, in combination with a more strategic focus on organisational culture and processes. An OD intervention involves entering into an ongoing system of relationships, to occur between or among systems, groups or objects for the purpose of helping them (Millward, 2005).

2a) Theories of OD & Change: HSMC & SSMC

Von Bertalanffy (1968) illustrated the success of analysing and defining problems of an industrial nature via the use of a systems engineering approach, now known as Hard Systems Methodology (HSM). Hard systems thinking, or the ‘functionalist systems approach’ to organisational development and change, seeks to model the real world environment of concern in a systematic manner with a view to optimising its performance in accordance to pre-determined ends and objectives (Petkov et al., 2008). The central assumption of Hard Systems Methodologies (HSM) is that the ‘world’ consists of many interacting systems of which some are not working effectively, but can be made to work better. Therefore hard systems models of change (HSMC) view the

world as systematic and HSM evolved as a means of defining a solution to a problem, and implicit in hard systems thinking is the demand for quantification and optimisation (Petkov et al., 2008). However, the hard systems approach is too rigid for exploring the complex area of human sciences, and therefore a Soft Systems Methodology (SSM) could be applied to many situations.

Soft systems thinking evolved from HSM and systems engineering and whereas hard systems thinking assumes the view that technically-based problems can be solved in a systematic and functionalist manner, SSM explores many options and issues and how they interconnect. The assumptions made by SSM are therefore very different to HSM because it views the world as complex and the process of investigation is considered itself as a learning system.

Soft systems models of change (SSMC) have been used in both public and private sector management to deal effectively with the problems of organisational improvement and change. Peter Checkland and colleagues are often accredited with the introduction of SSMC, and has employed soft systems methodologies in a variety of settings within the NHS. SSMC was formulated as a way to structure problem-solving and decision-making under the vagueness of complex human systems. A human system is identified as a collection of activities in which people are purposefully engaged as well as the relationships between these activities (Presley & Meade, 2002). As such, in contrast to HSMC, the world is taken to be complex, messy and with diverse perspectives (Petkov et al., 2008) and where there may be several different assessments of a problem. Soft systems thinking is also categorised as an interpretive systems approach and the primary areas of concern in this approach are perceptions, values, beliefs and interests. SSMs therefore emphasise each individual's perception of reality and therefore works with these to understand individual beliefs, values, perceptions and interests (Petkov et al., 2008).

Soft systems methodological approaches adopt principles which are often divergent from those inherent in Hard Systems Models. Hard systems maintain that the world can be fully and objectively modelled and

represented, a stark contrast from SSM which focus on the social context in which an organisation is performing as well as the individual subjectivity that is present in the employees of such social organisations (Checkland, 1999). Embracing the 'complexity and confusion' of inquiry and investigation in SSM is therefore a necessity, whereas HSM believe that the same inquiry and investigation should be ordered and systematic. As such SSM practitioners do not assume that a situation can be assumed to consist of objectives which can be defined and thus used to improve performance but rather thrives on an ambiguous, 'messy' approach. SSM therefore appreciates socially-based situations and attempts to change the relationships between people, thus making improvements on these. SSM researchers and practitioners therefore aim to improve the social situation of individuals via the use of both quantitative and qualitative approaches (Wilson, 2001).

2a.1) Advantages of SSMC

Many researchers make the claim that SSMC are used precisely because they are suited to successfully examining the contexts and complexities of problems associated with organisational change initiatives. An example of such is the use of SSMC in the NHS, because it is suited to performance improvement in such highly demanding and complex organisations. Jacobs (2004) argues that the use of SSMC can help managers and others to develop new perspectives by accounting for factors otherwise ignored and challenge prevailing attitudes and entrenched assumptions.

Also, the study of human science is very complex owing to the nature of the components that are studied, and SSM has the major advantage over HSM in that it can accommodate poorly defined and ambiguous information. Additionally, in studying the behaviour and interaction of individuals as a system, investigation using a systems approach can reveal the make-up of 'living' systems, thus emphasising the importance of individual contributions. A soft systems approach therefore permits analysis of the complexities of organisations by

exploring their constituent parts and their interactions, and is not restrictive (Rushton, 2003).

HSMC seek to model the real world environment, with a view to optimising its performance in accordance to pre-determined ends and objectives. Therefore, HSM assume that the real world of the workplace can be made to work more effectively and efficiently via systematic and pre-determined ends, with an implicit need for the use of quantification and optimisation. SSM, however, take the view that the world is complex and dynamic, and as such the use of hard systems methods with its fixed and pre-determined outcomes is unsuitable. Therefore SSM are very often used in order to emphasise the importance of individual contributions to the organisation.

As SSM maintain, implicit in any organisational change initiative are the individuals that make up the change and the way in which these individuals take to the change is important. Therefore resistance of organisational change is very important in the change process.

2b) Resistance to Organisational Change

According to Szabla (2007), planned organisational change initiatives have a poor success rate. Indeed both Hammer (1996) and Champy (1995) claim that more than half of all organisational change efforts studied failed. Although researchers have cited various obstacles to organisational change, including factors such as politics and conflict between groups, Szabla (2007) suggests that human resistance to change is the main obstacle to successful outcomes. Individual ability to adapt to changeable situations is a desirable characteristic in organisations which are often more fast paced and dynamic today than in the recent past. Despite this it is often individuals or groups of employees who resist change processes within their workplace. An understanding of this resistance concept is therefore integral to successful change outcomes.

Resistance to change as a concept came into the literature on organisational change through psychoanalysis and the human relations movement (Curtis & White, 2002). A review of existing literature suggests

that there is no commonly held definition of resistance to organisational change (Bruckman, 2008), with definitions ranging from wilful opposition to change to valuable passion (Dent & Prowley, 2001). Also, further difficulties in defining resistance include that the word 'change' has been criticised as being too monolithic (Dent & Goldberg, 1999). For example, very few people resist a pay rise, the opportunity to work on an assignment that they consider exciting, or more resources to accomplish their work (Bruckman, 2008). However researchers and practitioners alike have found it difficult to come to a consensus definition of what resistance is (Szabla, 2007). For example social scientists may define it as an actual force which blocks the attempts of change leaders and thus defining it negatively. Others however have conceptualised it positively, framing resistance as something that needs to be understood in order to ensure successful change (Ford & Ford, 1994). Furthermore Maurer (1996) describes it from a paradoxical place, arguing that it can be both constructive and damaging.

However, in a review of past empirical research Piderit (2000) found that resistance is generally conceptualised as existing in three separate components:

1. A Cognitive State: An employee adopting a negative position toward change means that negative interpretations of the change processes are adopted.
2. An Emotion: others have addressed employees' affective reactions, such as feeling agitated, anxious or even depressed as a result of planned organisational change.
3. A Behavioural Intention: finally, some studies found behaviours ranging from expression of concern to their peers or supervisors, to more severe actions such as slowdowns, strikes or sabotage.

Due to the low overall change success rate, and the effect that resistance can have on the success of change initiatives, it is important that any change initiative at least identifies potential resistance as it can mean the difference between the success and failure of a change initiative. Therefore soft systems organisational change initiatives, which on the most part involve employees taking part in the change initiative as participants as well as members of staff, run a high risk of being affected by resistance to change. Initiatives aimed at

intervening in workplace stress, such as that proposed in the current project, may therefore be severely affected by employee resistance to change.

3) The Current Project

The organisation which has agreed to take part in the current study is a borough council in the East of England, to be called PAO (i.e. the participating organisation). It had been agreed prior to the research beginning that PAO would be the organisation which takes part. PAO is currently (from 2008 onwards) going through a time of severe financial austerity, as is the rest of the government-owned public sector and many privately-owned organisations, and as such are going through a series of organisational efficiency and effectiveness development changes, known throughout PAO as Fundamental Service Reviews (FSR). However the FSR process also takes into account the views and opinions of employees from all levels of the organisation, making the processes involved participatory in nature. Examples of outcome changes that have taken place due to the FSR processes include more flexible working for all employees (including at which desk all individuals sit on any working day) and more efficient communication technologies for when working from home (e.g. Broadband and telephone access from home). These organisational changes have the potential to affect the outcome and effectiveness of the current project, and as such have to be taken into consideration at various stages of the research (see **Chapter V, Section 2** for a more in-depth review of the organisation).

Organisational stress has the potential to affect the financial running of an organisation (see **Chapter III, Section 1c.3**). Compelling strength of evidence has suggested that primary organisational stress interventions (see **Chapter III, Section 1e.1**) which focus on making changes at the source of stress, although not utilised as often as secondary and tertiary initiatives, have the potential to make long-term positive changes to the organisation. As such, this project will focus on everyday stressors as experienced by individuals during their work day, and attempting to reduce or eliminate some of the identified stressors via organisational change initiatives.

The Health and Safety Executive (HSE) is a crucial organisation responsible for health and safety in the workplace. The HSE has identified occupational stress as a potential health and safety risk similar to other (see **Chapter VI, Section 2a**), more tangible risks such as physical dangers. As such the HSE has developed a set of Management Standards (MS) related to occupational stress, and thus again highlighting the perceived importance of tackling stress in the workplace. These management standards draw very heavily on the Job

Demands-Control-Support (JDCS) model of organisational stress (see **Chapter II, Section 1b.1**, as originally conceptualised by Karasek in 1969). Based upon the Management Standards as developed by the HSE, a Management Standards Indicator Tool (MSIT) was also developed (see **Chapter VI, Section 2a**). Therefore, in accordance with the Management Standards as set out by the HSE the project is going to adopt the Job Demands-Control-Support as a reference framework for working, although it is understood that the JDCS is no catch-all for the explanation of workplace stress.

Understanding the structure of an organisation is important because it allows researchers and management alike to plan the effects that events such as organisational change initiatives may have on the workplace. According to Charles Handy's conceptualisation of organisational structure and culture, the PAO would fit perfectly into the 'Role Culture' (see **Chapter V, Section 2b**). As a government organisation, PAO runs as a classic bureaucracy with clearly defined layers of employment. **Chapter V, Section 2** shows how PAO fits into this Role Culture, which is depicted by Handy as a Greek temple. The individual in overall charge of the organisation, the Chief Executive, is represented pictorially by the peak of the roof of the Greek chapel. The executive directors who are in charge of two 'services' each are represented by the base of the roof structure, and are held up by the pillars which lead to the ground. Individuals who conduct the everyday work within the organisation, perhaps that which the general public see and encounter, are represented by the pillars of the organisation, without which the organisation could not function and as such the Temple would not be able to stand. The knowledge of PAO working in a Role Culture is important because it helps to inform the types of organisational development and change initiative that should be introduced to PAO.

Soft Systems Models of Change (SSMC) were first described by Peter Checkland (1969) as a contrast to Hard Systems Methodologies (HSM, see **Chapter IV, Section 2b.2**). While HSM view the world as systematic and are used as a means of defining a problem, soft systems methodologies (SSM) views the world as complex, and takes the dynamic nature of organisations (and the employees which comprise the organisation) into account in the change process. Therefore, in contrast to HSM, both qualitative and quantitative research methods are coveted. As already demonstrated, the PAO is an organisation which is ever-changing. The following chapter will critically discuss the conceptual framework to be taken into consideration throughout this thesis, as well as a detailed description of the type of organisation which takes part in the presented thesis.

Chapter V:

Conceptual Framework
& Organisational
Context

Chapter V: Conceptual Framework & Organisational Context

1) Conceptual Framework

This chapter will begin with a description of the conceptual framework to be utilised in the presented thesis. The framework will therefore provide an understanding as to why and how the presented work is utilised, drawing together relevant background literature as discussed and evaluated throughout **Chapters 2, 3 and 4** as well as an indication as to why the particular areas are most suitable. Secondly the chapter will help to provide organisational context to the reader in order to allow more of an understanding of the participating organisation.

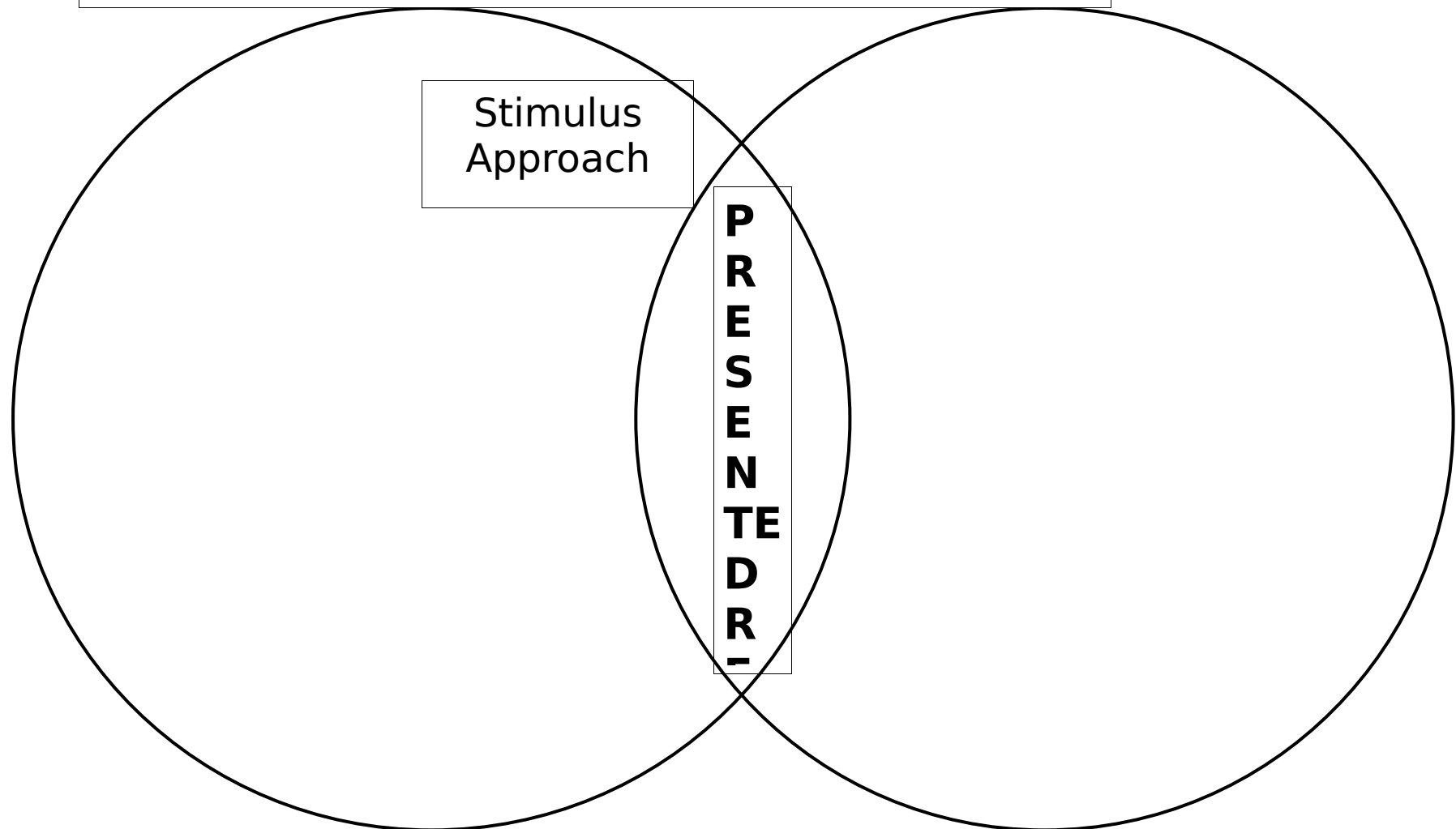
With respect to psychosocial stress in the workplace, a number of definitions and theories have been explored. The current project takes into account two of these theories: the transactional theory as proposed by Lazarus and Folkman, and Stimulus theories which originated in the physical engineering literature. Both of these have been analysed in some detail in **Chapter II Sections 1a.2 and 1a.3**, and the relevance of each is now discussed. According to the transactional theory, stress emerges from interactions between the individual and his/her environment, with maladaptive coping mechanisms also playing a key part. Differently however the stimulus approach argues that individual tolerance to stress is variable and limited, with either too many stressors, or stressors being too chronic, overwhelming individual resources and therefore leading to stress-related outcomes. While the two approaches take different stances the model which has probably been most influential in research over the last two decades (e.g. Gyorkos et al., 2012) has been based on both theories, with authors and researchers who have taken the Job Demands-Control-Support approach to stress in the workplace describing it as originating from a stimulus point of view (McClenahan, Giles & Mallett, 2007). Therefore as well as including the individual variability assessed in the Stimulus approach, the presented research also takes into account the transactional nature of stress. Lastly, the

interaction between demands, control and social support will also be assessed as to the relevance of the phenomena in research.

The majority of the research literature to date has focussed upon the experience of major life events as antecedents to the experience of stress in the workplace (Song et al., 2011). Research designs have therefore reflected this, with cross-sectional and longitudinal survey designs being readily used in order to investigate major life events. The approach toward studying stress is slowly changing however. For example an early publication within the daily hassles literature by Wheeler and Reis (1991, pp. 340) describes daily stressors as those that “fill most of our working time and occupy the vast majority of our conscious attention”, and research is increasingly showing that daily hassles may have the potential to impact as strongly as major life events (see **Chapter 2**). The presented study takes into account both of the prevailing approaches.

One of the most important outcomes of this thesis regards the implementation of organisational change interventions in order to improve upon employee experience of stress in the workplace. While many conceptualisations have been put forward with regard to organisational change, one of the most widely known and understood is that of Hard Systems (HSMs) and Soft Systems (SSMs) models of change. Hard systems methodologists are typified by quantification within the positivist tradition, with quantifiable aims and objectives set to be met and therefore enhance an organisation (Petkov et al., 2008). On the other hand, Soft Systems approaches are ‘messy’ or ‘fuzzy’, and see the organisation as a more complex entity. Indeed SSM integrate the understanding that complex human systems make organisations and organisational change initiatives vague with very little scope for setting objectifiable aims and objectives. It is the argument taken within the presented research that HSMC are unsuitable for purpose, particularly when attempting to address employee health and wellbeing structures such as stress and daily hassles which are by their very nature subjective phenomena.

Figure 6: Diagrammatic representation of the conceptual framework.



*It is worth noting at this point that the work is situated more within the 'stress' literature, i.e. on the left of this diagram. However, with an organisational change emphasis and the work being conducted within an organisational setting it is necessary to critically discuss some of the organisational literature also.

primary techniques are proactive in that they seek to remove or alter the organisational system which is causing the stress. Research on the impact of primary techniques are scant in number when compared to secondary and tertiary approaches (Ongori & Agolla, 2008), although there is increasing agreement that the utilisation of primary methods provide the longest-lasting and more effective change outcomes. The presented study therefore took a primary management approach, looking at areas of the workplace through a soft systems approach which can be altered and improved upon in order to ameliorate stress before it becomes an outcome in employees.

Lastly in order to successfully implement any change initiative it is important to understand the type of organisation the researcher is working with in order to ensure that certain factors are taken into account throughout the change process. Charles Handy's typology of organisational types and culture provides the researcher with a useful understanding as to what works best within particular organisations, as well as some of the barriers which may be inherent within the different types of organisation. Similarly, whether or not an organisation is a learning organisation can have a huge impact on the way that organisational change is implemented. Organisations that operate in such a way are constantly learning the experience of its employees, management, external contractors, consumers etc and so they are continually seeking to improve themselves. Therefore, for example, implementing a developmental change process within these organisations may encounter less resistance to change.

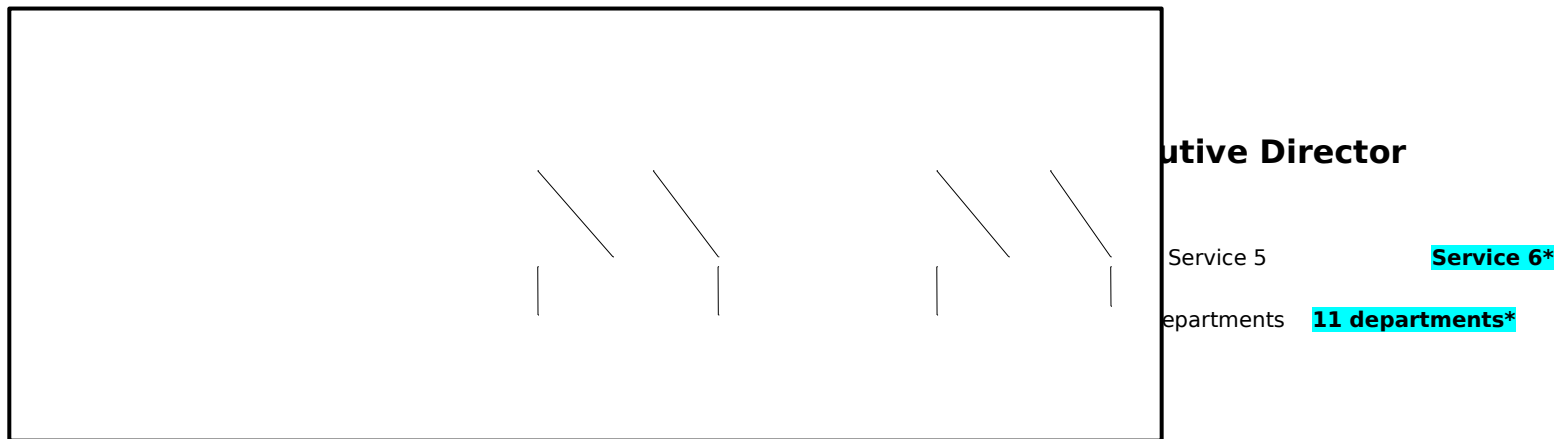
It is clear from the conceptual framework within *Figure 6* and accompanying descriptions that the presented research emphasises two areas. First of all an understanding of organisational stress is important in order to study the area. Similarly, in order to undertake an organisational change initiative which is based on employee health and wellbeing an understanding of the change process as well as the type of organisation the research is to be

taken part in is also extremely important. The Venn diagram presented in *Figure 6* therefore presents the importance of the business- and stress-related areas. Lastly however, it should be noted that this is a study which does place a heavier emphasis upon the stress literature due to the nature of the work.

2) Organisational Background

The following section of the chapter is included in order to confer a sound understanding of the participating organisation. The section will begin with an explanation of demographic elements of the organisation and the particular Service (department) within which the presented study takes place, including an analysis of the organisation in terms of Charles Handy's conceptualisation. An analysis of organisational turnover rates in comparison to national statistics, organisational sickness rates (as measured via days lost) and finally stress-related illness statistics are also presented.

The main premise is therefore to provide a context, an understanding of the participating organisation in a national context, as well as an understanding of the 'Service' in which participating employees work. However, it must be explicitly noted that this is a project based within an organisation, rather than being about an organisation or an organisational/business-related study. Therefore due to the project having an element of change within the organisation it is necessary to gain a clear understanding of the type of organisation taking part.



*Participating Service and Departments

2a) Organisational Demographics

The organisation in which the present study took place is a public-sector borough council organisation in the East of England, consisting of approximately 1,045 employees. The organisation is hierarchical in nature (as evidenced from *Figure 7*) and consists of six separate 'Service' areas, each also consisting of a number of smaller interrelated teams and departments. The organisation has a clear managerial structure as would be expected in any hierarchical organisation with an overall chief executive as well as executive directors, each responsible for two services. The departments within each service area also have their own managers, as well as line managers and supervisors.

The service in which the present study is taking place is **Service 6** on *Figure 7*, which had 181 employees at the end of 2011, each of which were eligible to take part in the study. Service 6 is somewhat unique within the organisation because employees are based throughout a number of working sites punctuating two separate towns, approximately 20 miles apart. The main 'Hub' of the organisation is based in one town, with a number of 'satellite sites' based in the second, approximately 20 miles away.

2b) Organisational Structure and Handy's Conceptualisation

As noted in **Chapter IV Section 1a**, Charles Handy built upon Harrison's arguments that there are four types of organisational culture into which all businesses can be placed. Researchers such as Brown (1998) have

emphasised Handy's four organisational cultures as relating to types of organisation, and that these types should be taken into account when looking at the correct ways of working with and within these organisations. As can be seen in *Figure 7* above, the structure of the participating organisation strongly resembles that of the 'Role' culture, which depicts a hierarchical bureaucracy. Handy's depiction of the Role culture argues that it is best depicted via a Greek temple (see *Figure 3*), with a number of specialist functions represented by the columns of the temple.

Figure 3: The Role Culture A hierarchical bureaucracy which deals with specialist functions.

When looking at *Figures 3 and 6* it becomes clear that there are strong overlaps – the point of the roof of the temple represents the head of the organisation (i.e. the Chief Executive), and below him are a number of other senior executives (i.e. the base of the roof). The pillars of the temple represent the specialist functions of the organisation, which clearly relate to the specialist functions of the six 'Services' which constitute the whole of the organisation. Additionally, as described by Handy there are many individuals with technical expertise within the organisation and indeed civil service organisations are exemplars of role cultures (Brown, 1998).

While Organisations with a role culture are effective in stable situations, they also exist in a dynamic, ever-changing environment which makes them slow to react to change. This has been a clear problem for the participating organisation – financial austerity changes to the whole of the country has meant a cut in government funding to the organisation, and therefore a number of changes to it. For example, many individuals being made

compulsorily redundant (see **Section 4a** below) as well as voluntary redundancies which the organisation and its employees have been struggling to get to grips with.

2c) Organisational Turnover & Sickness Absence

2c.1) Organisational Turnover Data

According to a recent CIPD annual survey report (Chartered Institute of Personnel Development, 2011b) the median labour turnover in the UK has generally been decreasing over the past 4 years. For the year 2011 the median turnover rate was found to be 12.5%, with the majority of turnover described as ‘voluntary’. **Table 2** shows the national median turnover figures for all reporting organisations in the UK, as well as national turnover figures for public and private sector organisations. Finally, turnover figures for the participating organisation and Service 6 in particular are presented. It is important to note that while the overall national figures in **Table 2** are reported for all employees who left organisations, the rest of the figures quoted relate to voluntary turnover only.

Table 2: National and organisational voluntary turnover figures for national organisations (public and private), and the presented organisation.

Year	National Figures† (All Organisations)	National Figures† (Public Organisations)	National Figures† (Private Organisations)	Participating Organisation†	Service 6†
------	--	--	---	--------------------------------	---------------

2011	12.5%	3.4%	8.7%	7.5%	5.5%
2010	13.5%	5.8%	7.4%	--	--
2009	15.7%	7.6%	10.4%	9.1%	--

†Median figures reported because a normal distribution was not found.

National figures indicate that turnover has fallen over the past 4 years. However, according to CIPD figures this was to be expected because unemployment has risen throughout the last three years, and it is believed that a decrease in voluntary turnover is to be expected when unemployment is highest and rising (CIPD, 2011a).

Voluntary-only figures, which do not include redundancies and retirements etc, suggest that while turnover has fallen steadily within public-sector organisations, the figures within private organisations are more unsteady.

Turnover figures* available from the participating organisation are for those who left the organisation voluntarily. Figures available for the whole of the organisation suggest that, over the period of 2009 to 2011, turnover has dropped by 1.6%. While voluntary turnover for the participating organisation is similar to that reported by private-sector organisations, it is much higher than the figures reported for public-sector organisations for the years ending 2009 and 2011. Turnover figures for the participating Service area are only available for the year-ending 2011, and suggest that while the Service has a lower level of turnover than the whole of the organisation, it still has a higher level of turnover than the median level reported by the CIPD for public-sector organisations (Chartered Institute of Personnel Development, 2011a).

2c.2) Working Days Lost due to Sickness Absence

An analysis of the number of days lost in organisations due to ill health is important because the CIPD (2011a) indicate that the median amount of days lost within all organisations equates to £673 per employee, an

***The organisation routinely collects turnover and sickness absence data annually. Managers kindly gave the author access to that data in order to provide essential background context to this study.**

increase of £73 per employee from 2010. However, these figures disguise quite considerable differences between types of organisation. For example, while the median cost to private organisations is £446 per person per year it is much greater to public-sector organisations at £800 per employee. It is also of note that the median value is reported by the CIPD because different organisations utilise different methods of cost analysis, and only approximately 43% of all organisations complete a 'days lost' cost analysis per employee.

of the organisation with respect to illness.

ce stress has the potential to
al, behaviour and emotional
f working days lost should the
percentage number of days lost within
year-end of 2010. Musculo-skeletal
on 1b.1.3) are consistently among
on over the five years. Along these
high, with only a small dip in the
ealth issues are among the most

Musculo-Skeletal	1271.43	30.3	866.29	22.9
Mental Health (Inc Stress)	1127.43	26.8	775.80	20.5
Operations & Treatments	756.82	18.0	981.71	25.9
Stress alone	568.57	13.5	341.71	9.0
Heart & Blood Pressure	266.66	6.3	85.0	2.2
Back Problems	125.29	3.0	202.71	5.4

* It is worth noting that these are the official reasons as defined by GP letters and notes

While *Figure 2* describes the reasons for all working days lost (including short-term sickness absence and long-term absences) within the participating organisation, **Table 3** above depicts the total number of days lost throughout the organisation, taking into account only long-term absences. It is often important to make a distinction between long-term and short-term absences. This is because many short-term absences (as defined as fewer than 21 days of missing work) are for 'minor' illnesses such as cold/flu, stomach upsets of headache/migraine which can upset an organisation but are often reported less than longer-term absences. Indeed, the Chartered Institute of Personnel Development (CIPD, 2011a) found that these minor illnesses were the top cause of all short-term absences in 98% of all organisations, and when separated from public and private organisations also the top cause of short-term absences in 98% of public-sector organisations. These short-term absences would add to the overall figures for 'Viral Infections' and 'Stomach, Liver, Kidney' problems as described in *Figure 8* (above).

In contrast, the CIPD (2011a) found that stress was the top cause of long-term absence (defined by the CIPD as four weeks or more) in 58% of all organisations and in 70% of all public-sector organisations in the period 2010-2011. Similarly, throughout the period of 2009 to 2011 mental health issues, including stress, were the second-highest reason given for long-term sickness absences in the participating organisation. When mental health issues are further broken down, stress is the biggest mental health problem responsible for long-term days lost, responsible for 9% of all long-term absences in 2009-2010 and 13.5% in 2010-2011.

Finally, it is worth noting that the number of days lost due to stress are generally understood to be under-representative of the actual number of days lost. For example, a Department of Health-funded internet and radio advertisement campaign (Time to Change, 2008) launched in 2008 urges employees to discuss mental health issues, attempting to break down the stigma associated with mental health in the UK. This campaign illustrates that the stigma surrounding mental health in this country is an important reason behind the under-reporting of mental health-related illness in the workplace.

Table 4: Total number of working days lost due to stress (short and long-term), stress as a percentage of all mental health days lost, and stress as a percentage of all days lost throughout the organisation.

Period	No. Working Days Lost Due to Stress	Stress as % of Days Lost to Ill Mental Health	Stress as % of all Days Lost
2010-2011	654.6	51.2	8.7
2009-2010	445.7	46.9	5.5
2008-2009	369.8	46.9	4.9
2008-2007	592.2	48	6.2

Table 4 shows the number of all days lost in the participating organisation from 2007 to 2011 as a result of stress, stress as a percentage of all days lost due to mental health issues, and finally stress as a percentage of all days lost. Through the period of 2010 to 2011 stress has been responsible for more days lost (654.6) and a higher percentage of days lost with respect to ill mental health (51.2%) and highest percentage of all days lost (8.7%) of each of the past four year-long periods. This illustrates that stress is therefore the biggest individual mental health issue in the current organisation, responsible for many days lost (and therefore much of the cost of days lost) and something that should be addressed.

To summarise, this second half of the chapter was intended to give the reader a strong background understanding of the participating organisation, as well as the impact that stress and turnover is having within it. Therefore an understanding of how the organisation is structured in order to help to focus future organisational change strategies is garnered, as well as an understanding as to how both the organisation as a whole and Service 6 in particular are performing with regard to stress-related sick leave and turnover. Indeed the work has demonstrated that, as of 2011, Service 6 has a lower turnover rate than all organisations as a whole and the participating organisation. However, the turnover rate is higher than the average for all public-sector organisations thus demonstrating an evolving organisation. Similarly it was found that stress has a strong impact on the participating organisation and Service 6, with it being the third highest cause of long-term sickness absence in the organisation. Stress therefore clearly has an impact on the participating organisation, and has meant a large number of working days lost. As such a focus on a methodology designed to improve on the experience of organisational stress has the potential to have strong positive impacts within the organisation.

Chapter VI:

Methodology

Chapter VI: Methodology

The current chapter will address how the research questions detailed at the end of **Chapter I** and reiterated below are to be answered, and will also depict how the background literature discussed critically in the previous chapters is incorporated into the research methodology utilised in the presented study. It begins with a critical discussion about the design of the study, outlining what qualitative and quantitative approaches to data collection and analysis are, as well as an analysis of the approach to research in the current study. It evaluates the use of this approach and the philosophical standpoint within which this research method fits. The methods used in the initial data collection stage are detailed, including the psychometric properties of the quantitative survey components as well as an analysis of the merits of the use of three further phases: a log phase, semi-structured interviewing, and focus groups.

Objectives:

- To develop a local stress theory.
- To develop an appropriate intervention strategy based on staff views.

Primary Research Question:

1. Can the results of a participatory Appreciative Inquiry methodology be successfully implemented into a local borough council organisation?

Secondary Research Questions

2. What are the sources of day-to-day stress (i.e. 'daily hassles') for employees in the borough council.

3. Can an Appreciative Inquiry methodology be used to design feasible psychosocial stress interventions for the improvement of daily hassles within a local borough council organisation?

1) Design

Choosing an appropriate research method can be fraught with difficulty. For example Patton (1990) describes the common debate over how to conduct research when there is such an argument over the best use of two fundamentally different and often competing paradigms. To one extreme is the more traditional and often seen as more scientific approach to research – positivism, which is associated with hypothesis testing via the use of quantitative techniques. To the other extreme is phenomenological enquiry, which is based on the application of qualitative and naturalistic approaches to understanding human experience.

Inherent within the design of the current project are both quantitative and qualitative approaches (see *Figure 10* for an overview of the project structure). The study utilised quantitative techniques in the form of a survey which consisted of two scales, with this quantitative element used to provide a contextual background analysis of the participating organisation (PAO). The survey (which was distributed twice, once before the qualitative phases and 12 months after) consisted of two separate questionnaires, one chosen because of its ability to separate psychosocial factors found within the workplace which are both working well, and not working as well, and the other a workplace-specific tool which assesses employee psychological health. These results therefore also form part of the Local Stress Theory, as assumed in **Research Objective 1** (see **Chapter VIII Part 4, Section 10**).

The study also uses the qualitative techniques of daily logs, interviews and focus groups. The daily logs have been used to investigate in some depth the areas within the workplace that are working well, and how aspects of these areas within the workplace can be transferred to other parts which are not working as well. All employees within the participating department in the organisation were then offered the opportunity to take part in a semi-structured interview in order to examine in more detail the results of the log phase, as well as providing a less structured approach than that inherent within the log phase. Finally, focus groups have been conducted in order to devise feasible workplace interventions which are designed to improve the working experience of those within the department of the PAO. Indeed, it is this qualitative approach which forms the majority of the Appreciative Inquiry approach to be critiqued in **Section 1b**.

1a) Mixed Methods Research

Qualitative and quantitative approaches to research methodology and data analysis differ theoretically, conceptually and practically, and are frequently seen as based on opposite and opposing philosophies (Webb, 1988). Quantitative (a positivist approach) research involves the reduction of phenomena being studied to numerical values for analysis (Smith, 2007). Quantitative methodologies have been used by social scientists for decades in order to study associations between variables, or to attempt to determine 'cause and effect', aiming to test hypotheses via the use of objective measures and predicting and controlling phenomena (Webb, 1988).

By contrast qualitative (interpretivist/constructivist) research did not begin to make a major impact on psychological research until the 1980s, whereas before this time it had been largely the concern of social sciences

such as Sociology and Anthropology (Giles, 2002). Qualitative approaches involve collecting data from 'naturalistic' sources, such as verbal and observational reports, and the information analysed contextually (Smith, 2007). Therefore the concern with qualitative data is what a piece of data means, as opposed to finding the numerical properties with data collected quantitatively (Smith, 2007). Shih (1998) recognises that constructivist research has richness, holistic analysis and depth of description not found in positivism.

The positivist philosophy of science became apparent in the 19th century (Al-Hamdan & Anthony, 2010), with the paradigm predominant in medical disciplines (Eatserby-Smith et al., 1997). Positivist researchers assume that the methods utilised in the natural sciences such as biology and chemistry should be transferrable for use in the social sciences. It is therefore assumed that knowledge is made of objective facts which need to be discovered and understood. This objectivity means that social context is irrelevant, and that knowledge is not associated with individual understanding (Al-Hamdan & Anthony, 2010). Knowledge is assumed to be observable and measurable, and can be mapped in order to assume outcomes from events (Schulenberg, 2007). Positivist social science researchers believe that knowledge should be discovered using objective research techniques in which any pre-existing bias is removed to ensure that the researcher does not impact upon the outcomes of the research. They believe that we all exist and understand a single reality, which makes the discovery of causation a possibility through quantitative research techniques (Firestone, 1987).

Contrary to positivist philosophies, interpretive/constructivist approaches see individual people as dynamic and conscious of their own situation (Al Hamdan & Anthony, 2010). These approaches emerged in order to discover and analyse human experiences (Schwandt, 2000). Interpretivist research philosophies seek to understand social situations and activities, as well as improving understanding of the constructed meaning and

interpretations of individuals (Al-Hamdan & Anthony, 2010). These researchers attempt to discover participants' own realities by appreciating their experiences via the use of detailed descriptions. As is the case with monomethod positivists, qualitative purists reject the notion and methodologies associated with positivism. Therefore it is believed that there are a multiple possible realities between people and even within individuals. They argue that, unlike quantitative researchers who seek to generalise study results to wider populations, these generalisations are unsuitable without accompanying time and context considerations, and that the individual cannot be removed from their own knowledge because it is the subjectivity associated with discovering information which is the only source of reality (Guba, 1990). Various interpretations of situations and phenomena may therefore result from any qualitative research programme (Creswell, 1994).

Whilst it is useful to distinguish the two ends of the spectrum, e.g. from a historical point of view and to plan which is most appropriate when designing a research project, the distinction has often been overstated. For example, participation in unstructured interviews have been useful in the initial stages of projects, and these findings have been used to generate structured measuring tools for quantitatively-orientated research projects. Similarly, large-scale structured questionnaires have been followed up with in-depth interviewing of a sub-sample of respondents in order to gain richer data than are obtainable by self-completion questionnaires (Webb, 1988).

Despite the many claims of incompatibility in qualitative and quantitative methodologies, researchers often feel reluctant to discount either one or the other method. The worry is that by constraining research, or the discipline itself, to one set of methods would be unnecessarily restrictive and so a common call is for some sort of integration of the two methods (Wiggins, 2011). Mixed methods researchers are concerned with combining qualitative and quantitative research. Therefore these approaches do not fall into either the positivist or

interpretivist approaches as already discussed. Tashakkori and Creswell (2007, pp. 4) define mixed methods research as:

“Research in which the investigator collects and analyzes data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or a program of inquiry”.

Therefore a mixed methods study is one in which both a qualitative and quantitative research approach is present (Doyle et al., 2009), and the findings of both are amalgamated in order to draw conclusions. Mixed methods researchers argue that the integrative use of qualitative and quantitative approaches help to minimise the weaknesses inherent in both approaches whilst also enhancing the advantages (Johnson & Onwuegbuzie, 2004). Doyle et al. (2009) have identified a number of reasons why mixed methods approaches may be better than using solely positivist or solely interpretivist research:

1. *Triangulation*: increases validity of results by looking for similarities in qualitative and quantitative data outcomes.
2. *Completeness*: similarly to triangulation, combining results allows a rounded and fuller understanding of the situation being studied.
3. *Offsetting Weakness*: as previously mentioned, the use of mixed methods can offset the weaknesses of each approach while also building upon the strengths.
4. *Answering Different Research Questions*: monomethod approaches can be limited in the research questions which are approached, whereas mixed methods can be used to help answer a wider range of questions.

In traditional research there has been a view that either the positivist approach, inherent with a scientific model and the use quantitative methods, or the interpretivist approach, which has a larger degree of subjectivity

and the use of qualitative methods, must be taken in research (Doyle, Brady & Byrne, 2009). According to Kuhn (1962) these paradigms guide scientists in terms of what they observe and study, the nature of the questions that they ask about their object of study, how they structure these questions and how the results are interpreted.

Discussion Box 6: Qualitative and Quantitative Methods in the Present Study

In the present study quantitative methods were used in the first and last phases (see *Figure 3*) as a means to provide an initial analysis of the current stress situation within the participating organisation, as well as a contextual understanding of the PAO. Two questionnaires made up the overall survey (see **sections 2a** and **2b**) and were used in order to provide background information on the current 'stress status' of the participating department in the organisation, as well as the impact that these stressors are having on organisational employees.

Qualitative methods are also to be used in three separate elements of the current study, and were based on an Appreciative Inquiry methodology (see **section 1b**). Following the administration of the first survey, individuals were asked to complete a daily 'log' of their everyday experiences in the workplace for a period of 10 working days, focussing on the positive aspects of the working day. Secondly a number of individual semi-structured interviews were conducted with a selection of employees who put themselves forward to take part using the positive questioning required of AI techniques. Finally two focus groups took place with a selection of employee and management representatives to discuss feasible

1a.1) Research Paradigm: Pragmatism

Doyle et al. (2009) describe mixed methods as the approach which can close the gap often associated with monomethod research. Application of mixed methods therefore assumes that both interpretivist and positivist approaches can be taken in research, meaning that there are not only a number of knowledges of the social world, but also a variety of methods which can be used to find this information. As such neither monomethod approach is the best when it comes to gathering understanding of people's lives (Dures et al., 2010). Mixed methods research should therefore integrate a research paradigm which allows the use of qualitative and quantitative research into the most workable methodology. Along these lines the pragmatic paradigm is utilised as an approach for the use with mixed research methods. Pragmatism dismisses the monomethod approach advocated by strict quantitative or qualitative researchers, allowing the use of both methodologies within a single research study (Schulenberg, 2007).

While figures such as Dewey, James and Pierce originally articulated the ideas of pragmatism; Tashakkori and Teddlie (2003) formally links pragmatism and mixed methods research, arguing that:

1. Both quantitative and qualitative research methods may be used in a single study.
2. The research question should be of primary importance, more important than either the method or the philosophical view that underlies the method.
3. The forced choice dichotomy between positivism and constructivism should be abandoned.
4. A practical and applied research methodology should guide methodological choices.

Therefore pragmatic researchers embrace both qualitative and quantitative methodologies, rejecting true positivist and constructivist approaches, and is an approach which “embraces plurality of method and multiple

method philosophies” (Maxcy, 2003, pp. 52). On the simplest level, importance is weighted toward practical considerations for pragmatic researchers, particularly when attempting to discover meaning and truth. Therefore knowledge and research theories are judged on how well they work in practice (Dures et al., 2010). It advocates mixed methods and “a needs-based contingency approach to research method and concept selection” (Johnson & Onwuegbuzie, 2004, pp. 17). The most important consideration in pragmatic research therefore is on the consequences and outcomes of research, more so even than the methodology taken. As such the ends of the research justify the means utilised in order to get there (Doyle et al., 2009). Therefore the primary importance is on the question asked rather than the methods used and on the use of multiple forms of data collection in order to inform the problems under study. Therefore pragmatist research is pluralistic and orientated towards what works in practice (Creswell & Clark, 2011).

Discussion Box 7: Mixed Methods & Pragmatism and the Current Study

Quantitative and qualitative research methods were conducted separately, although the results of each are combined to address the research questions. The quantitative methods provided an unbiased and reliable assessment of the general types of stressors individuals face in the workplace as well as the impact that these stressors have. The qualitative elements provided a more personal and in-depth analysis, together with a group of discussions as to what feasible changes could be made to the organisation in order to improve working lives.

Pragmatism is a philosophy of research which emphasises the importance of the research question when designing a project, with the emphasis less on directing the approach taken, thus emphasising the use of mixed methods to come to an adequate answer. The methods chosen in the presented study have been done so as they are effective and feasible methods to address the questions at hand, while also encouraging full participation from as many interested parties

1b) Research Approach: Appreciative Inquiry (AI)

The Appreciative Inquiry (AI) philosophy incorporates a process for engaging individuals from any or all levels of a social organisation to produce systematic, effective and positive change, and has been used in small and large-scale initiatives (Cooperrider, Whitney & Stavros, 2008). Cooperrider and Srivastva's seminal work from 1987 developed the AI techniques, which focuses positively on what works well in organisations and other similar situations. Therefore instead of focussing on problems AI attempts to build on what works well, thus promoting positive relationships and builds upon the basic strengths of people or situations (Steyne, 2009). Through these positive assumptions about people, organisations and relationships, AI diverges away from deficit-orientated approaches and transforms the way in which organisational improvement and effectiveness are approached (Cooperrider, Whitney & Stavros, 2008).

AI is based on the simple assumption that every organisation has elements that work well, and these strengths can be the starting point for creating positive change. Therefore AI invites people to take part in dialogues and share stories about their past achievements, assets and unexplored potential. From this AI links the positive energy at the core of a situation directly to any change initiative, thus creating energy and excitement and a desire to move toward a shared dream (Cooperrider, Whitney & Stavros, 2008).

AI has been used largely in corporate and non-profit organisations with remarkable success increasing productivity, workplace compatibility, efficiency and customer satisfaction (Cooperrider, Whitney & Stavros, 2003). It is a participatory approach that captures the shared values and beliefs of individuals and enables them to

develop a vision for change. The central premise is that appreciating what works well generates a starting point for creating positive and meaningful change, so that what we focus on becomes our reality (Atkin & Lawson, 2006).

The principal assumption of AI is the use of positivity in questioning and dissemination of data, and the current study utilises this positivity assumption throughout. While the use of a quantitatively-based analytical tool cannot be argued to be part of any AI initiative, it is the results of both questionnaires within the departmental-wide survey that were reported positively to both staff and management and thus playing a part in the AI process. Indeed, the psychosocial stress-based tool in particular allows the identification of areas in the workplace which are working well, and those which need to be improved.

1b.1) History of AI

AI is currently enjoying increasing success across organisations as a fresh and versatile change process, and it is claimed to have numerous applications such as coaching and mentoring, organisational projects, and positive culture change (McAllister & Luckcock, 2009). Additionally, it has been used in business, management, sport and industry, as well as education, health, and the social services (Maclean, 2007). AI is said to have been built on the 'positive psychology' of Seligman of the late 1990s (Billings & Kowalski, 2008) which promotes the positive aspects of subjective experience and individual traits in order to improve quality of life (Seligman & Csikzentmihalyi, 2000). AI, which emphasises the use of affirmative questioning, employs the positive psychology concept to engage and encourage strengths and overcome weaknesses. AI has also been used successfully as a method of Action Research (Peelle, 2006) which has been gaining interest within the context of change management (Atkin &

Lawson, 2006). The main premise is to elicit narratives of success among participants that then create the 'lens' through which the future can be seen and planned (Kozik et al., 2009).

In 1987 Cooperrider and Srivastva's seminal work on AI claimed that the change and transformational power of AR is constrained due to the problem-orientated nature of the work (Fitzgerald, Murrell & Miller, 2003). AI's emphasis on the positive distinguishes it from other forms of AR, and it is claimed that AI fosters the development of a deep, collaborative and positive reception of what is well and good in organisations and social systems (Fitzgerald, Murrell & Miller, 2003), as opposed to looking at the issues present in organisations. AI also takes a social constructionist position (see **Section 1b.2** of this chapter), and in doing so AI researchers believe that a social world is created and constructed by the debates that we have about it (Steier, 1991).

The present study fits well with the AI philosophy in many ways. It engaged the participation of individuals from all levels of the organisation, ensuring collaboration of both management and employees. The PAO, as a publicly-funded borough council, is currently feeling the effects of the detrimental financial situation the UK is currently facing. Therefore, through discussions with the PAO it was agreed that the positive focus of AI could increase morale while allowing individuals to voice opinions of everyday psychosocial stress in the workplace, which has proven to be a potentially damaging organisational issue.

The current project creates the 'lens' through which future change can be seen and planned in the way data results are to be disseminated back to employees, as well as the ways questions are asked within the log phase. Results of the department-wide survey were fed back to the department as a whole in a positive manner, emphasising the areas which are currently working well (see **Section 3** for a thorough explanation and evaluation of the research process undertaken).

1b.2) Theoretical Foundations and Assumptions of AI

AI is a theory and method for organising and changing social systems. According to the founding fathers of the technique, the study of organisations needs to be guided by a desire to understand how and under what conditions change is created and sustained. Indeed, Hammonds (1998) states that in order to understand AI one needs to recognise that individual and group assumptions are central to any change effort.

AI is an approach to organisational change which emphasises and builds upon strengths and potential of a social organisation, and is based on social constructionist thought and its applications to management and organisational transformation. Social constructionism is the theory that people and organisations create their realities through their interpretations of and conversations about the world (Krattenmaker, 2001). It argues that individuals can have influence on the reality that they experience, and that we create our own realities to some extent (Fitzgerald, Murrell and Miller, 2003). Busche (1995) is watchful of offering a complete description of how AI should be conducted, particularly because the approach is only a little over two decades into its conception. However, he does offer the following summary:

“Appreciative Inquiry, as a method of changing social systems, is an attempt to generate a collective image of a new and better future by exploring the best of what is and what has been.” (Busche, 1995, pp. 14)

1.b.2.1) Appreciative Inquiry & Social Constructionism

A central premise of Appreciative Inquiry is that the appreciative process of knowledge creation is socially constructed (Cooperrider, Whitney & Stavros, 2008). Put more simply, knowing takes place through interaction with and within a social system, i.e. via dialogue within the system. Social constructionism is grounded in the idea that a social system creates its own reality and AI takes this theoretical framework to heart, as can be seen in that it is implicit in three of the five 'core principles' presented originally by Cooperrider & Srivastva in 1987, and places it in a positive context.

The five principles inspired and moved the foundations of AI from theory to practice, and launching an AI initiative requires an understanding of these principles in order to fully grasp AI theory and internalise the basis of the 4-D cycle (see *Figure 1* and *Figure 2*, Cooperrider, Whitney & Stavros, 2008). As previously detailed, social constructionism is a fundamental underpinning of AI. It therefore plays an important part in the theory, including providing the foundation for three of the following five central principles.

1. **The Constructionist Principle:** assumes that an organisation's destiny is bound up in people's understanding of it. Therefore human (social) knowledge and organisational destiny are intricately interwoven (Krattenmaker, 2001), and a constructionist would argue that the organisational change process begins with the questions that are asked (Cooperrider, Whitney & Stavros, 2008). In order to be effective, leaders must be good at understanding, reading and analysing organisations as living, human constructions and it is this understanding which stands at the centre of any change (Fitzgerald, Murrell & Miller, 2003). As such, any attempt to effect change should begin with an understanding of the individuals within the organisation (Richer et al., 2010).

2. **The Principle of Simultaneity:** this claims that the process of inquiry itself influences the direction of the change to be attained (Krattenmaker, 2001). Since organisations are living, human creations, inquiry and change cannot be separated and as such occur simultaneously (Fitzgerald, Murrell & Miller, 2003) in as much as the change process begins from the moment a question is asked and the dialogue begins (Cooperrider, Whitney & Stavros, 2008).
3. **The Poetic Principle:** this is a metaphor which sees the human organisation as an 'open book', and is related to the fact that the organisation is open to endless interpretive possibilities (Richer et al., 2010). Moreover we learn and are inspired by all experiences past, present and future (Cooperrider, Whitney and Stavros, 2008). Consequently, an organisation's 'story' is constantly being re-written by all those involved with the organisation, and therefore the organisation, like a good poem or piece of literature, is constantly being reinterpreted (Krattenmaker, 2001).

A key element of the AI approach is the creation of a collective image designed to stimulate change amongst individuals. This positive expectancy effect, where positive thoughts and actions bring about lasting change, provides the underpinnings for the two remaining AI principles. These are (Fitzgerald, Murrell & Miller, 2003):

4. **The Anticipatory Principle:** maintains that the most powerful vehicle for organisational improvement is the group's ideas for the future (Krattenmaker, 2001), and the most important resource for generating constructive organisational change is collective imagination and discourse about the future (Cooperrider, Whitney & Stavros, 2008). Therefore anticipation of the future is a catalytic force, and it is the image of the future which guides the current behaviours of any organism/organisation. For example, anticipating a

positive outcome from a specific set of circumstances creates images and feelings that will result in a positive set of thoughts and behaviours (Fitzgerald, Murrell & Millar, 2003).

5. **The Positivity Principle:** assumes that an inquiry based upon positive achievement, joy and hope works better than focussing on what is wrong and how these wrongs can be cured (Krattenmaker, 2001). This is claimed to be the most concrete of the five principles, with Cooperrider, Whitney and Stavros (2008) arguing that it has grown out of years of experience with AI. Organisations, as human systems, are largely affirmative systems and are therefore responsive to positive thought and knowledge. As such, building a sustained momentum for change requires large amounts of positive affect, e.g. feelings like hope, excitement and caring (Fitzgerald, Murrell & Millar, 2003).

The fourth and fifth of the AI principles are the most important for any change initiative to work (Krattenmaker, 2001). While the anticipatory principle views the collective imagination of the future as the catalyst for successful behaviour change, the positive principle assumed that positive inquiry works better than focussing on what is wrong, or how these things can be 'cured'. The current study does have a number of issues to get around with these two principles, however. These five principles are central to the theoretical basis of AI with respect to organising for a positive revolution in change, and the principles clarify that it is the positive image that results in the positive action. Therefore the organisation must make affirmative decisions to focus on the positive and as such lead inquiry.

Discussion Box 8: How the five principles relate to the aims of the current project.

1. The Constructivist Principle – *Organisational destiny is bound in individuals' understanding of it.*

A grip is gained on individual understanding of the organisation via all aspects of the AI process – the log, interview & focus groups. This understanding is taken to create a 'Local Stress Theory' for the participating department, with potential organisational changes also identified throughout.

2. The Principle of Simultaneity – *The process of inquiry influences direction of change.*

The methods used as well as the manner of questioning and discourse between employees and researcher act as the beginnings of the change process. Initial questioning (log phase) fuels the hope and enthusiasm required for change, with dissemination of results/information and further discourse (interviews & focus groups) identifying specific changes available to be made.

3. The Poetic Principle – *The organisation is an 'open book', open to endless interpretive possibilities.*

Each process inherent within the proposed project is designed to ensure that individuals have the opportunity to create new possibilities, new ideas and new dialogue. Through the three phases which form the AI process (logs, interviews & focus groups) the organisation is constantly being re-interpreted via the questioning and discourse by- and between-individuals. This allows an endless number of possibilities both for the creation of the stress theory and organisational changes.

4. The Anticipatory Principle – *Discourse and imagination are the most important resource for generating change.*

The three phases of the AI process allow almost limitless discourse and imagination. Through questioning within the log and interview phases, and the discourse between individuals in the focus groups, imagination is stimulated in participants thus acting as a driver for change.

1b.3) The Appreciative Inquiry Cycle

The AI model as originally conceptualised by Cooperrider and Srivastva (1987) is said to consist of a four-phase cycle, known as the '4 D's' (see *Figure 1*). The following is adapted from an AI case study by McAllister & Luckcock (2009) in which an AI methodology was utilised within a public council organisation in the North West of England in order to increase levels of customer service.

1) **Discover** – What's Working Well

The task is to discover the positive exceptions, successes and most vital or alive moments. This can be done both within and across organisations (i.e. as a benchmark setting) and across time (for example looking into the history of the organisation to discover success stories; Cooperrider, Whitney & Stavros, 2008). Individuals explain their personal experience of a phenomenon allowing a researcher to attempt to uncover and strengthen the positive in the phenomenon/situation (Steyn, 2009). In the case study by McAllister and Luckcock (2009) the process started by defining an affirmative topic, i.e. in this case what excellent customer service looks like.

2) **From Discovery to Dreaming** – The Ideal Service

This phase involves the creation of a new vision of the future. By creating new ground, new possibilities arise (Steyn, 2009). The assumption is that the research naturally begins to search further and envision new possibilities. This envisioning process involves creating a positive image of a desired and preferred future (Cooperrider, Whitney & Stavros, 2008). McAllister and Luckcock (2009) described this as allowing individuals space to 'dream' about what an ideal service would look like, with each participant encouraged to express their vision freely in , any way that they want, with a common theme emerging.

Figure 1: The 4D's of Appreciative Inquiry

2) Dreaming

Destiny
Discovery
Design
Topic Choice

3) From Dreaming

Describes what 's
specific work des
inspiring stateme
ideas are envision
example, this sta
in this section (M

translates what was 'dreamt' in the previous stage into some
proved. This is more than a vision – it should be an
what has worked in the past combined with what new
& Stavros, 2008). Therefore, within the City council
ged which included key elements of what was disclosed

4) From Design

Service

Creates and sustains what will be (Steyn, 2009). Once the shared image of the future of the organisation is gathered, members design ways to help move the organisation closer to the ideal, and because these ideals are grounded in reality, the organisation is empowered to make things happen (Cooperrider, Whitney & Stavros, 2008). Within the case study's context, this stage resulted in a re-thinking of the manner in which the service operated and the best way to resolve this change was envisaged, leading to many significantly positive outcomes (McAllister & Luckcock, 2009).

As already demonstrated AI is a relatively new methodology and one of the major drawbacks with much AI research is that it is very rarely evaluated, and when it is evaluated the methodology used is often poor. Inherent within similar research techniques, such as AR, are an evaluative step to each intervention cycle. This is lacking in the original AI conception as put forward by Cooperrider and Srivastva in 1987, and as such is a problem that is to be addressed in the current study, with the addition of a fifth 'D'.

The addition of this fifth 'D' is a new component to the AI process, introduced to the AI cycle in order to ensure efficient and effective evaluation of the change process inherent in the project design. The present project is one of the first of its kind to introduce this new step thus bringing the AI cycle design into line with other, more widely used cyclical research paradigms such as Action Research. The moniker 'Deliberate' was chosen for two principle reasons: first of all it begins with 'D', harmonising the use of the letter 'D' throughout the research process. Secondly, the Cambridge Online Dictionary (2011) describes 'Deliberate' as:

"Describes a movement, action or thought which is done carefully without hurrying."

Evaluation of the change process have been used is essential in order to discuss how effective the change process has been. Further interventions could be made to the process in order to make the change process more effective. lead to a new AI cycle, thus starting the process again. Therefore the aim of the evaluation is to discuss how effective the change process has been. Further interventions could be made to the process in order to make the change process more effective. lead to a new AI cycle, thus starting the process again.

2) Dream
3) Design
4) Destiny
5)
Deliberate
1) Discover
Affirmative topic choice

1b.4) AI, Organisational Stress & Organisational Change

As previously explored, Appreciative Inquiry is drawn from the more widely utilised Action Research methodology, and a number of studies have successfully utilised AR approaches in order to work on workplace stress. However to date few, if any, studies have utilised an AI method in order to address stress in the workplace. Indeed a thorough literature search by the researcher revealed no AI studies relating to occupational stress and strain, when utilising key word searches such as “stress”, “occupational stress”, and “workplace stress” in conjunction with “appreciative inquiry” when searching all possible databases (including PsycINFO, PsycARTICLES, and Business Source Premier) in the EBSCOHost online journal resource.

Discussion Box 9: AI & Pragmatism

The current study utilises a series of research methods, with a mix of qualitative and quantitative approaches constituting the overall make up of the study (see *Figure 10* for an overview of the project structure). Indeed, the project utilised a mixture of surveys and Appreciative Inquiry techniques in an innovative way, for which pragmatism is the ideal philosophy. Pragmatic philosophers adopt a stance which argues that the methods used in a research project should complement the questions and phenomena being researched, while taking into account the context in which research is being conducted. Within the present study the values and beliefs inherent in AI are adopted throughout the qualitative element of the research only. By combining these values with the quantitative element of the study a strong understanding of the 'stress situation' in the organisation can be grasped, thus addressing the research questions in an effective manner whilst also detailing the importance of a positive change process throughout this study. Despite this, it is acknowledged that there is potential for conflict between the use of

1b.6.4) Overview of the Project Process & Structure

Figure 10 depicts the path of the current project. The process begins and ends with all employees within the PAO given the opportunity to complete a survey (see **Section 2a**). The survey (Stages 1 and 5) is essential to the current project for three reasons: it provided a quick response piece of information to the PAO, thus providing the impetus for employees to carry on with the second phase of work, the log phase. Secondly, the reporting of quantitative results in a positive manner would fit into the AI assumption of positive messages and dialogue. Finally, it allowed the researcher to put the organisation into context while also providing a before-and-after change view of the organisation.

MSIT & MBI
Interviews

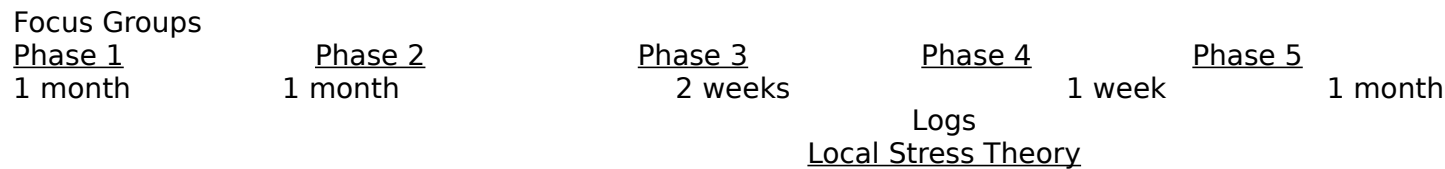


Figure 10: overview of the project structure

*Precisely 12 months between survey 1 and 2 administration

Stage 2 of the research process was the completion of daily logs (see **Section 2c** of this chapter), with all employees in the participating service area offered the chance to take part in this phase of the study. The use of the daily log phase was designed in conjunction with the PAO to be something that employees may be familiar with from previous change initiatives, meaning the numbers participating in this phase may be greater than should it have been a ‘fresh’ initiative. Individuals were asked to answer just four questions at the end of their work day phrased in a positive manner to follow the AI protocol, aimed at finding out what is working well in the organisation and why, and the areas which may need improvement.

The final two phases of the AI component were the conducting of interviews and focus groups. Semi-structured interviews (Phase 3, see **Section 2d**) were conducted with interested employees in order to ascertain further information on the outcomes of both the survey and log phases. Due to complete anonymity in the log phase, log results were analysed following completion of the phase and then fed back to individuals at the beginning of each interview. In this manner individuals were asked to comment further on the results, including the areas which work well for them in their work day and how these might be implemented into areas which do not

work as well. Phase 4, focus groups (see **Section 2e** of this chapter), were conducted with representatives of the staff who self-selected for participation. During the focus group the foremost consideration was on developing feasible interventions for workplace changes identified in the log and interview phases. Therefore the areas 'which are working well' were transferred to those 'which are not working as well', and as such interventions which were identified could then be implemented throughout the department.

2) Methods

The following section will provide an analysis of the methods that have been used in the presented study. It begins with an analysis of the suitability of use of two quantitative survey tools, followed by the description of a pilot study conducted. Next the qualitative phases of the project, designed to make up the stages of the Appreciative Inquiry cycle, are discussed critically alongside the procedure taken throughout the work. Lastly an evaluation as to the ethics of the presented study is given.

2a) HSE Management Standards Indicator Tool (HSE, 2004)

A large number and variety of tools designed to attempt to assess workplace stress have been developed. The UK Health and Safety Executive (HSE) have developed such a tool, named the Management Standards Indicator Tool (MSIT), a questionnaire which is used by organisations to monitor the working situations (or psychosocial hazards) which may lead to stress (Edwards et al., 2008).

It was in April of 1999 that the body responsible for health and safety in the UK (the Health and Safety Commission) stated that a wide-ranging debate was required in order to discuss the way forward for the issue of

work-related stress (Cousins et al., 2004). In response to this debate the HSE developed and released a set of Management Standards (MS) to assist everybody within an organisation to more effectively manage stress in the workplace. These MS are a set of conditions which, if satisfactorily met, reflect high levels of health, wellbeing and organisational performance. The standards are split into six areas (i.e. potential stressors) which are distinct from one another and yet nonetheless related:

- **Demands** – workload, work patterns, working environment.
- **Control** – how much say a person has in doing their work.
- **Support** – Split into Peer support and Managerial support.
 - *Peer Support*: encouragement, sponsorship and resources provided by colleagues.
 - *Managerial Support*: support provided by the organisation and the line management.
- **Relationships** – includes promoting positive working to avoid conflict and dealing with unacceptable behaviours.
- **Role** – whether people understand their role in the organisation, and whether the organisation does all it can to ensure they do not have conflicting roles.
- **Change** – how organisational change (large or small) is managed and communicated in the organisation.

The HSE subsequently published a self-report survey tool, known as the Management Standards Indicator Tool (MSIT). The tool was designed in order to help an organisation measure and therefore identify risk factors for stress. Initially the MSIT was based upon the JDCS model of stress in the workplace (see **Chapter II, Section 1b.1**) originally consisting of 100 potential items which were whittled down to the final 35-item survey. The measures assess each of the seven MS areas as described by the HSE (Edwards, 2008), and is designed to capture

employee understanding of their own work situation. The MSIT therefore assesses the current organisational situation with regard to employee stress and psychosocial hazards in the workplace.

Discussion Box 10: Why the MSIT in the Present Study

1. One of the major drivers for using the MSIT in the present project is that it can be used to reflect individual's perceptions of their social and ever-dynamic organisation. The MSIT reflects current understanding of the stress process within the organisation (Mackay, 2004), and as a generic tool allows the engagement of individuals from all levels of the social organisation.
2. With normal utilisation of the MSIT it is designed to assess the risk factors for psychosocial stress in the workplace, thus working against the 'traditional' AI approach. AI focuses on what is working well in an organisation as opposed to the negatives inherent within it (i.e. risk factors to stress). However, through the dissemination of results in a positive manner (therefore focussing on what's working well in the organisation) the focus on achievement, hope and joy (Krattenmaker, 2001) provided the beginnings of creating positive change.
3. The phrasing of the items which make up the MSIT are both positive and negative, and therefore at times do not follow the positive assumption of AI. However, as previously discussed it is the results of the MSIT surveys which helped fuel the positivity amongst staff, with the results of the first MSIT survey forming the starting point for change (i.e. Stage 1 of the AI cycle). At the end of the research process a department-wide survey was conducted

2a.1) Psychometric Properties of the MSIT

Researchers have described the MSIT as having excellent perceived face validity (e.g. Kompier, 2004; Edwards et al., 2008) indicating that on the surface it would seem that the tool does indeed measure psychosocial stress in the workplace. However, as Kompier noted in his 2004 review of the literature which was released along with the MSIT, one of the main disadvantages of the tool is a lack of psychometric property information. Indeed since the release of the MSIT and its two accompanying papers (Cousins et al., 2004; Mackay et al., 2004) there have been very few journal releases indicating psychometric properties.

Edwards et al. (2008) is one such study which has validated the use of the MSIT, having conducted the research involving 30,903 employees from within 39 UK organisations. Similarly, Cousins et al. (2004) describes the process taken in order to develop the MSIT while also reporting statistical analysis results. Again the tool as a whole and the items within the tool which represent the six (seven when support is split into Peer and Managerial Support) factors were adjudged to have good face validity. For each of the factors represented by the MS approach, a similar Cronbach's Alpha value was found in both the Cousins et al. (2004) journal article and the Edwards et al. (2008) study. See **Table 5** for these figures:

Table 5: Item numbers and Cronbach's Alpha values for each factor from two different studies of the MSIT.

Factor	Item Number	Cousins et al. (2004) α value	Edwards et al. (2008) α value
Demands (8 items)	3, 6, 9, 12, 16, 18, 20, 22	.89	.87
Control	2, 10, 15, 19, 25, 30	.78	.82

(6 items) Managerial Support	8, 23, 29, 33, 35	.87	.88
(5 items) Peer Support	7, 24, 27, 31	.81	.82
(4 items) Relationships	5, 14, 21, 34	.78	.78
(4 items) Role	1, 4, 11, 13, 17	.83	.83
(5 items) Change	26, 28, 32	.83	.80
(3 items)			

Therefore it can be seen that the 7 factors have all produced good internal reliability figures, and the later figures produced by Edwards (2008) compare favourably to those produced in the original article which accompanied the release of the MSIT. The difference between the two studies is that the earlier validation was conducted using a survey of individuals. However, the tool is designed to be used at an organisational-level, which is the method that the latter study utilised. As such it can be surmised that internal reliability is strong for use in either situation. Finally, Edwards et al. reported that the overall scale reliability for the 35-item measure was .92, a high figure which provides strong evidence that the scale is reliable.

Confirmatory Factor Analysis (CFA) was conducted by Edwards et al. (2008) in order to simultaneously analyse all variables in the MSIT scale, discovering whether the use of the scale is consistent with the data (i.e. therefore examining the MSIT factor structure). The reason that Edwards et al. (2008) deemed there to be a need for a CFA to be conducted is that previously in the Cousins et al. (2004) study an Exploratory Factor Analysis (EFA) was conducted and consequently required a follow up. However, the multivariate nature of the EFA means that

hypothesis testing is difficult to conduct. A first-order CFA of the seven-factor model of the MSIT as interpreted from the management standards examined earlier gave a statistically significant chi-square value, with further fit statistics indicating an acceptable level. Therefore the tool as demonstrated through the 7-factor model was found to be statistically sound. In contrast, a first-order CFA conducted on an additional first-order model also exhibited a statistically significant chi-square, with other goodness of fit statistics being poor and thus indicating that the seven-factor model is the most appropriate for use. Finally a second-order CFA, which seeks to find an overall factor as measured by the MSIT, was conducted in order to establish whether the scale contains a higher-order factor. Edwards et al. (2008) hypothesised that the MSIT can be explained by seven first-order factors as described above, and one second-order factor of overall general work-related stress. The second-order CFA confirmed this hypothesis, indicating that the scale does look at seven first order factors and one overall second order factor of work-related stress in general.

The MS were designed by the HSE using a qualitative approach which allowed bottom-up communication with a number of stakeholders (Cousins, 2004). In addition to demonstrating that the MS were developed using strong and in-depth methodologies, the bottom-up process is essential to the Appreciative Inquiry process due to the inclination that both the MS development and the nature of AI are user-, or employee-, led. Therefore the development of the MSIT for use in a bottom-up and user-led process fits nicely with the use of AI methodologies.

An important part of the MS is that organisations do not just make an assessment to see if they have a problem in the workplace, but that they also work to eliminate or at least alleviate the potential outcomes for any identified stressor (Cousins et al., 2004), and where possible the stressor its self. As earlier examined, AI is a cyclical process which is about identifying working strengths (i.e. stress in the workplace), and identifying how

these strengths can be applied to other areas of the workplace (i.e. by developing an intervention strategy, all via the use of positivity and positively framed discourse.

A final justification for the use of the MSIT alongside an AI methodology is that the second-order CFA as conducted by Edwards et al. (2008) found that it can also be utilised as an overall measure of stress in the workplace. This, in addition to the strong reliability coefficients gained by both Edwards et al. (2008) and Cousins et al. (2004) showing that there is very little change in the scale over time, means it can be used in order to adequately assess the changes in an organisation over an extended period of time.

2b) Maslach Burnout Inventory – General Scale (MBI-GS)

Burnout has been spoken about previously in **Chapter III Section 1b.4.3** as one of the many potential outcomes related to exposure to chronic stress in the workplace. When investigating burnout, the authors who conceptualised the idea assumed that in particular the emotional demands placed upon employees who work with troubled, suffering or unmotivated recipients were most likely to experience burnout (e.g. Freudemberger, 1974; Maslach, 1982). Therefore the original concept was designed to assess burnout particularly among those professionals who interact intensely and frequently with such recipients, for example nurses, counsellors, social workers (Schutte et al., 2000).

As such Maslach (1993, pp. 20) originally defined burnout as “a psychological syndrome of emotional exhaustion, depersonalisation, and reduced personal accomplishment among individuals who work with other

people in some capacity". The burnout construct was therefore conceptualised as consisting of three dimensions as follows:

- **Emotional Exhaustion:** feelings of being emotionally over-extended and depleted of one's resources.
- **Depersonalisation:** a negative, indifferent, or overly detached attitude toward others (often the recipient of one's care or service).
- **Reduced Personal Accomplishment:** a decline of feelings of competence and successful achievements in one's work.

In line with this conceptualisation, Maslach and Jackson (1986) devised the three-dimension Maslach Burnout Inventory-Human Services Survey (MBI-HSS as it is now known) which measures burnout among human services personnel. This proved to be a useful instrument for the assessment of professional burnout, but its use was (and still is) limited to professions in which contact with people constitutes a major part of the job role. Many of the items contained within the MBI-HSS refer directly to contact with clients, making it inappropriate for use in occupations outside of this (Taris et al., 1999).

To overcome these difficulties, Schaufeli, Leiter, Maslach & Jackson (1996) developed an MBI instrument for the measurement of burnout in professions which do not have a majority of contact with troubling clients (the MBI-GS; Maslach Burnout Inventory-General Scale). Like the MBI-HSS, the MBI-GS is conceptualised as consisting of three distinct dimensions, each of which mirror those in the original MBI-HSS. Some of the items contained in the re-worked MBI-GS are the same as those in the MBI-HSS, whilst others have been re-worded and still more newly

formulated (Taris et al., 1999). However these items are more generic than the original conceptions, and do not refer to other people that the individual is working with. The three dimensions of the MBI-GS are as follows:

- **Exhaustion (EX):** measured by five items and relate to a draining of resources (Schaufeli et al., 2002). Is generic in comparison to the MBI-HSS conceptualisation of Emotional Exhaustion, referring to fatigue but without describing the course of these feelings as being people-based (Taris et al., 1999).
- **Cynicism (CY):** measured by five items which reflect indifference or a distant attitude toward one's work in general, as opposed to personal relationships within the workplace (Taris et al., 1999).
- **Professional Efficacy (PE):** measured by six items which have a broader scope than that of personal accomplishment because it encompasses both the social and non-social accomplishments at work (Taris et al., 1999).

2b.1) Psychometric Properties of the MBI-GS

The Maslach Burnout Inventory series are the instrument used most frequently for measuring burnout (Diestel & Schmdit, 2010) and as such there have been various attempts to prove the validity and reliability of the various MBI-related scales, such as the Maslach Burnout Inventory-Human Services Scale and the Maslach Burnout Inventory-General Scale. The current study has taken the MBI-GS as the correct scale for use because it has been developed for use by individuals regardless of whether they work directly with service users or not, while others such as the MBI-HSS has been developed specifically for use by those working directly with others, or the MBI-ES (Maslach Burnout Inventory-Educators Survey) which has been developed specifically for those working in the

education services. **Table 6** shows the results of Cronbach's Alpha calculations in two different studies: one conducted with over 5,000 participants representative of the Norwegian population, (Langbelle et al., 2006) and the other including two samples (n=198 and n=236) of human services personnel and 'other professionals' respectively (Shirom & Melamed, 2006).

Table 6: Item numbers and Cronbach's alpha calculations from two different studies of the MBI-GS.

Factor	Item Number	Langbelle et al. (2006) α value	Shirom & Melamed (2006) α value
Exhaustion	1, 2, 3, 4, 6	.83 to .87	.88 and .88
Cynicism	8, 9, 13, 14, 15	.84 to .87	.78 and .87
Professional Efficacy	5, 7, 10, 11, 12, 16	.66 to .78	.81 and .76

The data from **Table 6** indicates that each of the three factors inherent in the MBI-GS have an acceptable level of internal reliability, surpassing the 0.7 level which is generally agreed as acceptable. There was one exception to this however. In the Langbelle et al. (2006) study the internal consistency calculations for Professional Efficacy of bus drivers was found to be unacceptable. The reason is unclear but generally it is accepted that each of the factors on the MBI have an acceptable-to-good level of internal consistency, indicating that each of the factors are assessing what Maslach and Jackson (1996) claimed that they measure.

The MBI-GS was published in 1996 and has been used in a large number studies throughout varying professions. Despite this, Richardsen & Martinussen (2005) argue that there have actually been very few studies of the psychometric properties of the scale. One such study by Bakker, Demerouti and Schaufeli (2002) however did

just this by recruiting participants from a variety of Dutch organisations to take part in an internet study. Results of the work strongly support the originally proposed three-factor structure, and a number of confirmatory factor analyses in each of the 8 Dutch organisations subsequently found the suggested three-factor structure. Similarly, Schutte et al. (2000) conducted confirmatory factor analysis using data from respondents of three different nations. Results show that the fit of the expected three-factor model was clearly superior to alternative one-factor and two-factor models, with the results replicated in five occupational groups as well as in the samples from three nations. Finally, Richardsen and Martinussen (2005) assessed the factorial validity of 7 different hypothetical models, consisting of data from 694 participants. It was found that the model which best represented the original conceptualisation of the MBI provided the best fit, and once allowances for particular errors was factored in the model was found to be an excellent fit. Therefore results from the three studies suggest that the three-factor model of the MBI best represents what is measured by the MBI-GS, making it a good measure of the burnout phenomenon amongst a general population.

Discussion Box 11: What the MSIT and MBI-GS are to be Used For

As previously demonstrated, the MBI-GS and MSIT are both reliable and factorially strong instruments for assessing burnout and the risk factors for workplace stress respectively. Within the context of the current study, the two form an overall survey tool, with the results designed to be used as a contextual analysis of the participating organisation. When the survey was completed by participants within the organisation, the results formed a 'benchmark' against which re-administration of the survey 12 months later provided an understanding of the way in which the organisation changed over the period of the study.

While there are a wide number and variety of tools designed to assess workplace stress, the MSIT was chosen for various reasons. First of all it is a tool developed and championed by the UK Health and Safety Executive, a government-run organisation responsible for the health and well-being of the UK employees. The MSIT has been developed specifically to assess the seven areas of the workplace which the HSE has deemed to have the greatest potential to have a negative impact on individuals, and unlike many other tools which are based solely on the Karasek & Theorell model of occupational stress the tool also assesses the impact of relationships, role and organisational change on stress outcomes. There are also various questionnaires which can be utilised in order to measure burnout, and even more which claim to have the ability to assess the potential outcomes associated with chronic psychosocial stress. However, the MBI-GS was chosen because it is the most often-utilised measure of general burnout, with burnout having been shown to be a persistent feature in many individuals who have faced chronic psychosocial stress in the workplace. The MBI-GS has been proven to be inherently valid and reliable and importantly it is work-based and strongly associated with chronic stress outcomes, rather than being a general measure of psychological health.

The survey helped answer the research questions because the MSIT initially allowed the discovery of the areas within the workplace which are working well with respect to psychosocial occupational stress, as well as those that need improvement in order to avoid said stress from becoming a chronic feature of employees' working lives. Therefore the MSIT will form an integral part of the 'local stress theory' which is essential to the research

2b.2) Pilot Study

As part of the selection process in order to determine which questionnaires should make up the survey within the presented study, two pilot studies were conducted (results of which can be seen in *Appendix 2*). Both pilot studies were completed anonymously by a sample of university-based staff members who were also asked to comment on the use of each questionnaire in either survey, with some individuals potentially completing both pilots.

Initial thoughts were to utilise the General Health Questionnaire rather than the Maslach Burnout Inventory. Pilot study 1 therefore consisted of individuals completing, and commenting on, the Management Standards Indicator Tool (see **Section 2a**) and the General Health Questionnaire-12 (GHQ), a short form of the longer General Health Questionnaire which is a measure of general psychological well-being. The GHQ has been widely-used in

the study of minor psychiatric problems (Makikangas et al., 2006) and was originally designed to assess disruptions in normal functioning and the emergence of new distressing symptoms (Shevlin & Adamson, 2005). Additionally, the tool has been proven to be both valid and reliable in numerous studies (e.g. Quek et al., 2001; Ye, 2009).

One of the reasons that the GHQ was designed was to measure changes in normal psychological functioning, which means it could be used as part of a strategy to evaluate the impact that psychosocial hazards may have had on a particular psychological outcome, for example stress in the workplace. The tool could therefore have been utilised in order to help answer at least part of *Research Objective 1*, concerning the creation of a 'local stress theory' and discovery of the potential psychosocial health outcomes associated with the stress

Results of Pilot Study 1, however, were not overly encouraging. While quantitative outcomes realised good reliability levels for both the MSIT and GHQ, it was the qualitative comments which prompted the change in stress outcome measure chosen. Eight out of nine participants who left a comment about use of the two tools together commented that they did not feel the GHQ was a good fit with the anticipated work-based outcomes of the study due to the generic health nature of the tool. The tool is designed to be used in a variety of situations and pilot participants felt that this would not make employees feel at ease with taking part in not only the survey phase of the project, but may reduce participation in the rest of the project also. Additionally, with the focus of the current study being psychosocial stress it was felt that there are likely to be tools available which are more suitable to assessing the impact that chronic daily psychosocial stress may have had on individuals. Additionally, participants also commented that the MSIT seemed to be a good tool for the assessment of psychosocial workplace stress, indicating good face validity. For two of the seven factors measured by the MSIT, Cronbach's Alpha reliability calculations resulted in lower-than the accepted 0.7 results. Therefore, despite recent studies (e.g. Cousins et al.,

2004, and Edwards et al., 2008) which have accompanied the publishing of the MSIT producing strong reliability statistics, utilising the MSIT in the context of Pilot Study 1 appears to have affected its suitability for use. Finally, the overall Cronbach's results for the MSIT were also found to be inadequate. These results suggested that the use of the MSIT and MBI-GS within one overall survey to assess the types of stress faced as well as the impact of this stress would not be appropriate.

As such a further pilot study was developed, with the MSIT again acting as a tool to measure psychosocial stress, and this time with the Maslach Burnout Inventory-General Scale providing an assessment of the outcome effects. Cronbach's alpha results indicated good internal consistency at the accepted (Cronbach, 1951) 0.7 level. In this second pilot seven out of 22 participants commented, with individuals responding positively about the face validity of the new combination of surveys, and one participant also stating that the new combination of tools was much better than those in the first pilot. In comparison to Pilot Study 1, Cronbach's alpha results for each of the factors inherent within the MSIT and the overall MSIT results are all acceptable, thus indicating better suitability for use alongside the MBI-GS (which also provided strong Cronbach's outcomes). Although there are various influences which may have swayed this outcome, for example small sample size and the potential of practice effects, these results combined with the qualitative statements from participants as to the suitability for use each indicate that the second combination of tools was better than the first within the context of the present study. Therefore it was decided that a combination of the MSIT and MBI-GS would make up the survey, as opposed to utilising the GHQ-12 as a measure of psychosocial stress outcomes.

2c) 'Log' Research Phase

Everyday experience suggests that we are not always in the same mood, and that phenomena such as job performance can fluctuate from day-to-day. Diary methods of data collection have been used over the past decade in work and organisational research (e.g. van Eerde et al. 2005), and particularly in areas of health and stress (Jones et al., 2007). In the presented research the daily logs were used in order to record everyday experiences.

Diaries are useful for collecting various types of data. For example they can be used to collect data one or

Discussion Box 12: How the Logs Link to AI

1) The questioning within the logs was designed to fit the central premise of positivity within the AI process. They assessed what is working well in the organisation, and how this can be applied to areas of the workplace which are not working as well (as identified through survey outcomes and log responses).

2) Completion of the logs gave individuals from all areas of the social organisation the chance to engage in an initiative designed to create systematic and positive change. The logs were used as the source of information by which the need for change is identified, as well as how this change can be implemented.

3) The manner of questioning allowed individuals to share stories about their past achievements and unexplored potential within the organisation.

The log phase was used to capture both the areas within the workplace that are working, as well as how the principles from the stronger parts of the organisation can be applied to areas within the organisation which are not working as well. By asking individuals to comment on 'what went well' in their day, as well as 'what didn't go as well' and 'how this can be improved' each of these aspects is addressed.

This phase played a part in the first three of the five stages of the revised AI cycle. They allowed elaboration upon the areas which are working well within the department, helping to alleviate some of the stressors employees may otherwise experience. Next the logs helped to determine how these specific areas of the workplace might be used to influence the parts which are not working as well and thus allowing individuals to 'dream' of

more times a day, and also allow the thoughts, feelings, and behaviours in the phenomena and individual under consideration's natural context. They are therefore ideal for the assessment of aspects of the workplace which can be dynamic, changing by the month, week or even day. Diary methods are therefore useful to capture the short-term dynamics of experiences within and between individuals in the work context (Ohly et al., 2010).

2c.1) Daily Diaries: Advantages and Disadvantages

When used correctly, diary research methods can provide information that is otherwise very difficult to obtain (Willig, 2008). By using diary-based methods, researchers can gather information based in people's natural life

contexts, for example in the workplace or at home. Therefore within this approach, phenomena and processes can be assessed in their natural settings, increasing the ecological validity of these approaches in particular when contrasted with more traditional laboratory-based studies. Additionally, data can be collected on a daily basis, or even several times a day, whereas other approaches such as surveys usually collect data at one point in time (Poppelton, Briner & Kiefer, 2008). Furthermore, an advantage of all daily diary studies compared to others such as surveys, interviews and focus groups is the reduction of retrospective bias (Reis & Gable, 2000). Participants are often asked to complete daily diaries at the end of the day, for example the end of the work day or just prior to going to bed. The task of the daily diary recorder is to chart particular events, thoughts or feelings throughout a certain period of the preceding day, meaning that the time lapse between an event happening and being recorded is often a matter of hours instead of days or weeks as in the case of survey recollections.

However, diary research techniques are not widely used as a method of data collection in psychological research because they can be difficult for all involved - the participants as well as the researchers. Participants are asked to make certain commitments such as maintaining a record of experiences, activities or feelings over an extended period (Willig, 2008). This is a distinct disadvantage because it can mean that the diary itself will have an effect on routines and experiences. Also Willig (2008) describes the diary as becoming a part of the individuals' life for the time that it is being considered, but nevertheless has to be handed over to the researcher at the end of the data collection phase. In turn, the researcher has the challenge of recruiting participants who are willing to keep a diary and maintain the motivation of said individuals. Additionally, in general these methods suffer from high drop-out and poor recruitment rates due to the extra demands that can be placed onto the individual. Finally, there are ethical concerns such as those inherent when asking individuals to keep certain types of diary, such as

pain-based or stress-related diaries. These can sensitise individuals to the issue being studied, causing them to reflect and respond to the issue being recorded.

Despite these potentially research-damaging and critical criticisms of diary research use, there are various courses of action which can be taken in order to ensure the limiting of these problems. By asking participants to fill in the research diary toward the end of the working day it can be put 'to the back' of the individual's mind throughout the work day, meaning it should not alter or adversely affect an individual's take on a situation. Also, as is the case with the present study, having adequate levels of buy-in and participation from management at all levels of the participating organisation will help to at least partially alleviate some of the poor retention and project up-take problems. Additionally, Ohly et al. (2010) argue that while research diary techniques do require a significant level of effort from participants, special attention must be paid to the design of the diary, for example by limiting the number of items to 5 or under to ensure too much of the participants' resources are not taken up. Moreover in order to deflect some of the potential ethical issues as mentioned previously, a positive diary reflection would mean that issues pertaining to the reflection of negatively-based questioning can be averted.

Within the present study, simplified 'logs' were chosen for use as opposed to often more detailed diary methods. The study asks participants to complete four questions, purposely designed to be brief to answer, with each of the questions asked adding a specific dimension to the AI process:

1. *What went well in your day?* The initial manner in which the positivity necessary in AI is created, and also helps to set the tone as to what areas are working well within the everyday working lives of employees.

2. *Why did it go well?* Further elaboration on the information from the first question. Again creates positivity and allows the researcher to begin to understand the mechanisms by which these positive areas can be transferred to other areas which are not working as well.
3. *What didn't go so well?* A potentially negative question again framed positively in the overall context of the logs. This allows the researcher to identify the areas within which potential improvement to employees' working lives can be made.
4. *How could it be improved?* When combined with the results from the department-wide survey as well as log questions 1 and 2 an idea as to the most feasible changes is formed, thus creating the lens through which future organisational adjustments can be made.

The decision to use these four questions as the basis of log responses was drawn from varying literature sources. The first question, in which individuals are asked to describe certain areas of the workplace that had worked well for them in the preceding working day, is based on the theoretical underpinning of Appreciative Inquiry. Indeed, investigating 'what's working well' is the essence of the first step in the AI cycle. The second question allows further investigation of this first question - a common criticism of daily diary/log approaches is the potential for gaining limited and superficial answers from participants (Willig, 2008). Therefore having participants further elaborate on answering from question one can overcome this limitation. Answering of the third question, a potential negative question framed in an overall positive context, may appear to contravene the positivity principle of AI. However, Newman and Fitzgerald (2001) claim that focussing solely on the positive is unlikely to culminate in effective and feasible change outcomes. Indeed Reed and Turner (2005) further argue that addressing organisational problems are part of the AI picture, but these problems should not be the central focus on any AI

intervention. Additionally, the principles of AI do not suggest ignoring problems but choose to take a different path by changing the focus to the elements which help the organisation to flourish and, through the individuals who make up the organisation, bring it to life (Richer et al., 2010). Lastly the fourth question again reflects the positivity principle, and helped to inform change interventions. One of the predominant outcomes of the presented thesis was to design feasible change interventions to be implemented within the PAO, and this fourth question was essential to answering this question (see **Chapter VIII, Part 1**).

These simplified logs were chosen as opposed to more complex and detailed (and more traditional) diary methods for a number of reasons relating to the participating organisation. First of all complex logs were discussed with staff representatives, but it was made clear that currently employees' workloads are too high to be able to take the working time to complete a complex diary consisting of numerous questions to answer, and felt that many would not complete their entries in their own time due to the need to 'switch off' from work. Secondly when the idea of utilising everyday diaries was put forward to the well-being officer within the PAO it was suggested that the more amenable logs (rather than diaries) would receive a good response from potential participants because similar formats had been used previously in the organisation. This meant that employees would respond to the research process as an organisational initiative, and not an outside initiative which is potentially full of ulterior motives. Finally, logs rather than diaries were chosen because they would be more suitable as part of the AI process. The questioning inherent within the shorter logs can be directed using affirmative inquiry, whereas longer diary entries are likely to be more fluent and difficult to direct.

What the 'Logs' are to be Used For

Participants were asked to complete the logs about their work day, at the end of every work day for up to two work weeks (10 days), in what was expected to be a 'normal' working fortnight. This time frame offered a good representation of what happens in the individual's working role, thus capturing the 'things that work well' and 'how they can be improved' on a regular, yet ordinary, basis. The main premise of the use of the log phase was to understand everyday working practices that are working well, and in a similar manner those that are not working as well and therefore informing the researcher of the psychosocial stressors employees are facing. The use of the AI methodology, and in particular the use of logs, meant that the positive working practices can be applied to the areas of practice which are not as positive. These results then led onto the next phase of the project: the use of semi-structured interviews and focus groups.

However, one potential limitation of this research design is that the amount and quality of information gained via the logs especially is likely to be brief, giving simplified information. While the preference for the use of shorter logs rather than more complex and informative diary entries has been demonstrated above, the simplified technique means that there is a need to follow up on the information gathered with methods that will garner more detail. Therefore follow-up interviews with participants were conducted in order to obtain more detailed personal information.

2d) Semi-Structured Interviews

Interviews are seen by many researchers as an essential part of much social research (Breakwell et al., 2000). Semi-structured interviews differ to the structured interview in that the latter have a formalised, limited set

of questions, and completely unstructured interviews resemble more conversational data, and as such should be analysed as such. Researchers engage in projects involving the interpretation of semi-structured data for a variety of reasons including exploration, description, comparison, and theory testing and building amongst other reasons (Bazeley, 2007). Semi-structured interviews are conducted with a fairly open framework which allow for focussed, two-way communications which are based broadly around particular interview schedules, with not all questions designed and phrased ahead of time. In this manner interesting themes and concepts which arise whilst conversing can be investigated with more thorough questioning, allowing both the interviewer and interviewee the flexibility to probe for details or discuss specific issues (Banister et al., 2006).

Semi-structured interviewing is primarily a qualitative approach to data collection, where this data collection technique is seen as one of the best ways to collect data for interpretative analysis (Smith, 2007). The aim of semi-structured interviews may be to explore precisely where it is believed there are gaps in the research allowing a researcher to tailor an approach better than with more structured means (i.e. by modifying questions in light of answers given; Banister et al., 2006). In addition to this an interview has a set of questions on an interview schedule, but the interview schedule is guided by this structure as opposed to dictated by it (as in the case of structured interviews, Smith, 2007). Importantly the use of semi-structured interviews facilitates the building of rapport with the participant, thus helping to get over problems such as respondents being motivated to lie and give false information etc (Smith, 2007). This interview methodology can also allow the exploration of complex issues that may be too complex to investigate through quantitative means given that quantitative methods attempt to simplify phenomena, meaning it can misrepresent the nature of the questions under investigation (Banister et al., 2006). Furthermore, interviews can be used at any stage of the research process, e.g. as part of piloting and

validating instruments, or at the end of the process in order to validate interpretations of other data, or as the main vehicle of data collection (Breakwell et al., 2000). Finally, there can be concerns with subjective answering when participants are responding on a standard format (e.g. a self-report questionnaire) for comparison with other individuals or groups (Banister et al., 2006).

However, conducting interviews on their own do have numerous potential drawbacks. Conducting, transcribing and analysing interviews is a complex, labour-intensive and potentially uncertain business (Banister et al., 2006). Interviews, like any other self-report method, rely on respondents being able and willing to give accurate and complete answers to questions posed (Breakwell et al., 2000), with an inability or unwillingness to do so having the potential to undermine the whole interview process. In addition, for many and diverse reasons respondents in the semi-structured interview process may be motivated to lie for various reasons, for example having a distrust of the researcher or an embarrassment of telling the truth (Breakwell et al., 2000). However, the skill of the researcher to build a good rapport with participants is the main method of dealing with this issue. Within the presented study Jermaine Ravalier has extensive semi-structured interviewing experience from master's degree research, meaning that this early rapport building is something that the researcher is familiar and comfortable with. Several studies, such as Huffcutt & Arthur (1994), and McDaniel et al. (1994), have indicated that structured interviews are both more valid and reliable than unstructured and semi-structured interviews. This increased validity/reliability however is a negative for many interviews, with structured interviews not allowing the exploration and deep understanding of interesting outcomes. However, within the presented study the increased reported reliability and validity in structured interviews limits the interview as to the potential of outcomes. For example the main idea behind utilising interviews is to develop upon results gained from log responses and illicit

previously unreported potential interventions - this would be difficult to do with completely structured interviewing. (Brtek & Motowidlo, 2002).

Discussion Box 13: How Semi-Structured Interviews Fit the AI Methodology

Semi-structured interviews fit the AI methodology excellently, and have been used in various pieces of anecdotal AI-based research. They allow individuals to put forward their own take on reality, with this process also continuing to help the seeds of enthusiasm directed at change to grow.

Interviewing also played a part in the first three of the five AI cycle steps. Step 1, discovery, is where the exceptional areas of working and the areas which work best are revealed. This was done in the interview stage by asking participants to elaborate and comment on positive results from the previous two stages (survey results and logs). Step 2, dream, allowed participants to imagine the changes that they believe can make a positive impact in the working environment. Finally step 3, design, is where the changes that were envisioned previously are turned into a reality, with participants bringing together their knowledge of the

2e) Focus Groups

Focus groups have been in use for a number of decades, and are thought to first have been used in the 1930s. They came about because researchers of the time were uneasy with the influence of the interviewer in individual interview sessions, as well as the limitations inherent in traditional questionnaire methodologies (Kruger, 1988). Therefore social scientists developed methods to lessen the impact that researchers could have in the

interview process, providing more of an emphasis on the interviewee rather than the interviewer (Nyamathi & Shuler, 1990). The focus group is a qualitative group interview research method which uses the interaction among participants as a source of data (Chioncel et al., 2003). Proponents of focus groups believe that, when carried out correctly, they allow the investigation of a multitude of perspectives and therefore realities within a particular area (Nyamathi & Shuler, 1990). As such focus group interviews involve multiple respondents' views in the generation of data, have a particular focus on phenomena of interest, and are facilitated by a trained researcher (Brewerton, 2001). A focus group can therefore be defined as:

“a research technique that collects data through group interaction on a topic determined by the researcher” (Morgan, 1996, pp. 130).

Focus groups allow researchers to obtain in-depth comments and feedback from participants in a proactive, semi-structured and interactive manner. The aim of conducting a focus group is to become closer to the participants' understanding and perspectives of certain situations. As such, it is a systematic study of the world of everyday experience (Nyamathi & Shuler, 1990) via the generation of detailed narrative data, as opposed to numerical data (Knafl & Howard, 1984). While focus groups are not usually geared toward the formal testing of hypotheses (Brewerton, 2001), a series of focus groups can be effectively utilised for other purposes such as evaluating the outcome of a study. Indeed, the HSE claim that (Health and Safety Executive, 2004) focus groups are the ideal methodology for the development of change processes based on MSIT outcomes. Within the context of the present study, focus groups are used in order to assess the feasibility of suggested changes gathered via the previous research stages. Focus group participants consisted of representatives of employees and management

from different levels within the department, and the areas which require change as well as how the organisational changes can be implemented were the centre of the focus group discussions.

The focus group is moderated by a researcher (Vogt, King & King, 2004) whose role is to introduce the members to one another, introduce the focus group, and gently 'steer' the discussion. The role of the moderator can be to remind the group of the focus of the group discussion, ensure participation by all members of the group, and to see to any disagreements or other needs of group members. The moderator also has the essential task of setting certain limits and rules, such as the beginning and the end of the process, and certain ground rules which need to be adhered to in order to ensure the smooth running of the process (Willig, 2008). It is often the researcher that 'facilitates' the group processes in order to ensure the pre-planned range of issues is covered, while also allowing material to enter the discussion. As such, it is essential that the researcher does not dominate proceedings and, if necessary, the researcher should steer the discussion along more productive lines should it seem to be 'running out of steam' (Howitt & Cramer, 2007). A further task of the moderator includes the creation of a positive experience for participants, an essential component of the Appreciative Inquiry technique which is in its very nature a positive experience for the respondent and social setting (Gibbs, 1997).

Discussion Box 14: How Focus Groups Fit AI Methodologies

Focus group interviewing played a part in two of the five AI cycle steps, 'Design' and 'Destiny'. Participant input was used to design the 'innovative service', i.e. to voice their own narrative upon changes which had been suggested in the previous interview stage. This means that organisational changes to areas of the workplace that are not working as well as the areas identified in the log and interview phases were uncovered, together with action plans for change. The end goal of the focus groups was to have a number of workable, feasible organisational changes recorded which can then be typed up by the lead researcher (Hermine Beaulieu) to be presented to organisational management and

2e.1) Critique of Focus Groups

As with the use of any research technique there have been numerous positive and negative comments made by various researchers about the use of focus group methodologies. There are many potential advantages to the use of focus groups, chief of which is that when conducted correctly focus groups stress the exchange of information via open and honest discussions of respondent knowledge, views and beliefs (Hoffman et al., 2002). Therefore the importance and truth of knowledge as understood and relayed by the participant are gathered. Additionally, Vaughn et al. (1996) describe individuals as important information sources as they can have the ability to discuss in critical detail their own knowledge, views and beliefs.

However Chioncel et al. (2003) argue that despite the numerous instructions and precise requirements which are set out describing how to conduct focus group research, there is a lack of definitive studies on the methodological aspects, and more precisely the validity and reliability of use. Upon review of the literature however (e.g. see Smith, 2009; Wiliig, 2008; Chioncel et al., 2003), a method of working for the focus groups was developed which took into account a variety of different topics. Validity of outcomes were affirmed via participants 'member checking' Dr Andrew McVicar's hand-written focus group notations, as well as the notes and discussions recorded by Jermaine Ravalier on the flipchart at the front of the room. Reliability of outcome was determined by comparing focus group outcomes to those from the log and individual interview phases, as well as giving

organisational management the opportunity to scrutinise and discuss the outcomes. Additionally focus groups take a great deal of time and effort to organise, run, and transcribe, and logistically bringing a group of 6-10 people at the same time and the same place can be extremely difficult (Howitt & Cramer, 2007). This disadvantage was overcome by ensuring that PAO management and human resources department allowed individuals to put their job roles aside for the time of the focus group without any retribution. A further potential weakness pertains to the representativeness of findings – because of the limited number of participants in focus groups, and the limited number of groups themselves which can be undertaken, the generalisability of the information obtained to the more general population is lacking (Vogt, King & King, 2004). This further disadvantage can also be well countered with respect to the current study - despite just 13 participants taking part in the focus group interviews overall, they were representative of many of the various job roles across organisational sites within Service 6.

Certain topics and/or populations may not lend themselves to focus group discussion (Vogt, King & King, 2004). For example, discussing the results of certain medical trials with participants may have certain issues. Additionally, both participants and the researcher have the potential to impact and influence findings. Leading and biased questioning, attitude of the moderator and having one particularly dominant participant can each adversely affect the outcome of focus group studies (Vogt, King & King, 2004). Byers et al. (2002) point out the potential problem that can occur due to group interactions, such as producing conformity pressures which may distort the individuals' genuine perception of events, or simply limit the information that individuals are willing to provide.

There are, however, several things that the researcher can do to minimise many of these potential problems. First of all, a good level of training for the moderators would limit some of the issues such as having the potential to deal with dominant members of the group, showing how their points have been taken into consideration while

also bringing in other members of the group. Also, the researcher can select a moderator who is not only intimately familiar with the research goals but who is also knowledgeable regarding the need to take an objective, yet empathic, stance (Krueger, 1998). Additionally, conformity effects can be reduced by asking participants to specify how their views differ from those expressed by others throughout the session (Vogt, King & King, 2004). Finally, setting 'ground rules' at the start of the group process can help individuals distinguish between acceptable and unacceptable behaviours. Indeed Jermaine Ravalier utilised his years of teaching experience combined with wide reading around the subject of facilitation to effectively smooth the progress of the focus group, ensuring that all participants were able to contribute equally without domination by any individual. Also job roles were never revealed in the focus groups, so it was unclear to the researchers and (as far as possible) participants whether or not management were taking part in the work.

So important can focus groups be to the successful outcome of certain types of research, upon release of the Management Standards Indicator Tool User Manual (Health and Safety Executive, 2004) the Health and Safety Executive suggest that they should be used to explore any issues raised from the results of MSIT outcomes. The authors suggest that while the use of MSIT outcomes alone would be sufficient for identifying good parts and practices within a participating organisation, as well as areas that require improvement, the results alone only provide an indication as to how an organisation is performing in managing work-related stress. Therefore the use of focus groups would help employees and management to discuss MSIT outcomes and "explore any issues raised in more detail" (HSE, 2004, pp. 4).

It is the contention of the presented research however that the use of focus groups alone may be as limiting as the use of MSIT results alone in the discussion of methods used to improve upon workplace stress. This may be

particularly pertinent should the facilitator focus the group questioning around the MSIT results only, with inevitable issues surrounding the inhibitory nature of mixed management and staff focus groups. The presented research therefore goes beyond the use of focus groups alone. The log phase provided a structured short-answer method of collecting data about which no pre-determined categories are suggested by the researcher, and similarly the semi-structured interviews allowed participants to build upon these and other (possibly unrelated) areas. Lastly focus groups were used to determine feasible action plans for change. The presented methodology therefore provides a more in-depth approach than the MSIT and focus-group methods alone suggested by the HSE.

Discussion Box 15: Self-Report Measures

As described throughout **Chapter VI (Methodology)**, the presented research utilised a number of self-report measures as data collection techniques. Indeed, each of the five phases of the research design was based upon the use of self-report measures, which are subjective and personable accounts of phenomena which are attributed to each particular respondent. It is the subjectivity of these approaches, and the presented research having occurred within a particular department of a particular organisation, which made the knowledge and background of the participating organisation important (see **Chapter V**). The combined results of the qualitative self-report measures were used to help inform the development of interventions which can be attributed to all employees in the participating

3) Procedure & Participants

The present study is an original mixed methods design in that the AI aspect has never been used in order to investigate everyday psychosocial stress in the workplace. Indeed the original project conceptualisation involved

the use of an Action Research approach. However, upon a meeting with staff and management representatives it was decided that this original design was far too complex, time consuming for potential participants, and the lack of anonymity throughout the process meant that many individuals who were already fearful for their jobs were unlikely to ‘rock the boat’ by participating in a study which looks at the problems inherent within the organisation (see *Appendix 14* for a summary of the responses toward the original AR process). Therefore, following a re-thinking of methodology and a meeting with senior management it was agreed that a positively-focused piece, with the spotlight on what is working well in the organisation, would promote a feeling of positivity and hope within the working population.

A second change from the original AR design concerned the participants that were to take part in the study, and in particular the departments that would take part. It was originally agreed that two out of the six departments which make up the borough council would take part, but following some requests for individuals to take part it was discovered that for various operational reasons one department had to be removed from the study while internal investigations were conducted. Therefore the one remaining department, consisting of 181 employees, was scheduled to take part alone. Indeed, the overall structure of the final study is presented in **Section 1b.6.4**. Following the revision to the research design, the tools which were to make up the departmental survey were chosen, and it was decided that a pilot (see **Section 2b.2**) of the survey would be conducted in order to ascertain suitability for use.

As previously described all individuals in the participating department of the research proper, including management, were invited to take part in each of the phases of the study. The two survey tools were re-written verbatim onto the online questionnaire distribution tool SurveyMonkey for those with work-based email addresses.

For those without online capabilities at work the tools were re-written verbatim but also re-formatted to ensure that the two tools fit completely onto two sides of A4 paper. As well as the survey tools, demographic information was also sought from individuals. This information included age range, length of employment, gender and area within the department. These particular demographics were chosen in conjunction with the council's well-being officer in order to match those used in previous organisational surveys. Individuals were invited to take part in the survey either by email or via letter. Therefore a specific email consisting of information about the study as well as a link to the online version was put together (see *Appendix 4*), and a similar hard copy invitation letter with accompanying paper version of the survey was also drawn up (see *Appendix 5* for a copy of the letter sent to hard copy participants). Also in the hard copy pack was a stamped addressed envelope for individuals to return the survey to the Jermaine Ravalier (the researcher) care of Dr Andrew McVicar at Anglia Ruskin University in order to ensure anonymity. Email prompts were sent to those who originally received an email version of the survey on a weekly basis over a period of 4 weeks. Data were analysed using the Analysis Tool supplied with the MSIT, and using SPSS, with results brought forward into the log phase.

After the 4 week period the online survey 'collector' was closed, meaning no more responses could be logged online. Once the collector was closed, an information leaflet was distributed to all employees detailing the next steps of the project, and two weeks later the log phase was begun. The four questions inherent within the log phase were re-created on SurveyMonkey, which allowed individuals to complete the questions in free-flowing prose on the internet. These were emailed to individuals in an invitation email in an identical manner to the electronic survey. Hard copy log questions were printed for 10 working days, with two days per A4 side, and mailed to those without company email addresses alongside an invitation letter and stamped addressed envelope to be returned

again to Jermaine Ravalier at Anglia Ruskin University. Weekly prompts were sent via email to individuals and the collector again closed after 4 weeks. Data were analysed via simple content analytical techniques using NVivo 8 qualitative data management software, and again results brought forward into the individual interview research phase.

The next phase of the research process involved one-to-one semi-structured interviews with employees. Due to the anonymity of the entire research process to this point, and therefore the uncertainty as to who had or had not taken part in the process, all individuals in the department were invited to take part in the interview process. Again individuals were invited via two methods: email and hard copy. An invitation letter was sent in a similar manner to the previous two invitations, and employees were asked to contact Jermaine Ravalier on his Anglia Ruskin University email address, or via telephone. Blocks of time were booked in private meeting rooms at the council over four half-days. Each interview was designed to last approximately 30 minutes (in order to ensure too much time is not taken from individuals' working time), with an extra 10 minutes built into the end of each interview to ensure participants did not 'run in' to each other and henceforth maintain anonymity. The interview schedule (see *Appendix 7*) was designed to ensure that participants understand the role that their responses will play in the study. The questioning schedule was designed to ensure that the positivity principle of AI was maintained while also eliciting as much helpful information as possible during the context of the discussions. Individuals were also offered the chance to re-read their own interview transcripts and analysis of these transcripts in order to ensure validity within the process. Prior to any questions being asked of interviewees participants were asked to read a participant information sheet (see *Appendix 8*) as well as a consent sheet (*Appendix 9*) which

needed to be signed, with both interviewer and interviewee keeping a signed copy each. Data were analysed using thematic analysis (see **Section 4b.1**) with the help of NVivo 8.

The fourth phase of the AI process was the conducting of two focus group interviews. Again all employees were invited to take part via email and hard copy letter, with dates and venues allocated by the HR Business Partner of Service 6. Each focus group venue was conducted in a different town - one where the main 'Hub' or the organisation is located and the second where the satellite sites are. Once introductions were made, ground rules detailed and the idea behind the use of focus groups explained the focus group proper began. Following completion of the focus group interviews participants were given a final chance to comment on notes made on a flip chart during the interview and review the notes made by Dr McVicar.

The fifth and final stage of the research process was the re-administration of the MSIT/MBI-GS survey for a second time. This time all participants were invited to take part via email invitation as all employees now had regular access to work emails either at home or at work. The collector remained open for 4 weeks, with a reminder email sent out in weeks 2 and 3. The survey tool was exactly the same as it was for Survey 1, including demographic information. Again data were analysed using the Analysis Tool and SPSS quantitative data analysis computer programme.

Once the results of each stage were gathered and action plans designed, the results were presented to senior management from within the participating department. A detailed report of each stage was prepared and sent via email to senior management, and a meeting scheduled for approximately 2 weeks later in order to discuss any points that management felt important. At the meeting any points requiring further explanation or clarification were offered, and management agreed to discuss each of the action plans raised. Approximately one month

following this meeting the Human Resources business partner for the participating department sent an email with **Table 29** attached detailing how and when each of the suggested interventions would be implemented, and as such how the fourth phase of the AI cycle (Destiny) would be fulfilled. Lastly management also agreed that the detailed reports put together for results from each of the phases of research would be provided to all employees in two ways. First all employees were emailed a copy of the detailed report, and also a hard copy was made available in staff-only communal areas within each site that the participating department is responsible for.

4) Analytical Procedure

Data analysis of the MSIT and MBI-GS were conducted using both the Microsoft Excel 2007 and SPSS version 16.0 computer programmes. The MSIT has its own data Analysis Tool built into a specialised Microsoft Excel spreadsheet. In addition, the tool compares the results of the data input into the tool to baseline data and gives colour coded readouts with different colours denoting performance relative to this benchmark. The data is computed within the Excel spreadsheet and feedback given, with the raw data also available for exportation to other, more sophisticated numerical data analysis tools (in this case SPSS v16.0).

Analysis of the MSIT using the MSIT Analysis Tool was conducted for four principle reasons. Firstly the analysis tool gives readouts of descriptive statistics of the individuals that have taken place in the study and taken part in the Baseline' Audit' Data stage. Secondly the results gained give comparable readouts of the current results versus baseline organisations, allowing comparison of stress figures for the current organisation against the baseline set out by the HSE. In addition the analyses suggest whether or not the results gained are at a satisfactory level according to the HSE, i.e. whether or not individuals have too much stress in a particular area of

their working and thus allowing suggestions for improvements. Thirdly, the use of the MSIT analysis tool allows the raw data to be exported to the SPSS statistics programme. SPSS was used for further, more succinct and detailed analysis of the MSIT raw data as well as analysis of the MBI-GS data gathered. In addition, the raw data from both the MSIT and MBI-GS being kept as an SPSS database spreadsheet means that comparison analysis can be conducted on the data following intervention implementation later in the timeline. Finally, the quantitative data sets were used as part of the process conducted in order to inform the researcher of the stressful issues that individuals face within their jobs.

4a) Qualitative Data Analysis (Daily Logs)

In order to analyse the daily log responses from Phase 2 of the research process (see *Figure 10* for a diagram of the five phases of the research procedure), a content analytic approach was taken. Content analysis allows the systematic exploration of qualitative data in order to determine emerging patterns and themes (Peetz & Reams, 2011), with a strong focus on how common certain features of the data are (Howitt & Cramer, 2011).

A content analytic approach was taken for a variety of reasons. First of all the data was collected over a period of 4 weeks, and in order to ensure no bias in the overall data analysis the responses were not looked at until the collector was closed. Looking at the information on a daily basis has the potential to build an unrepresentative mental picture of responses in the researcher's mind, thus impacting upon the analytical methodology and outcomes. It would also be difficult for the researcher to gain the closeness of data required for more detailed qualitative data analysis techniques in which the researcher has taken an active role in the collection of data.

Along these lines the majority of the data were collected online which could then be copied directly into Microsoft Word and NVivo 8, making the transcription which plays such an important part in developing closeness to the data unnecessary. Similarly there was very little time between the closing of the log online collector and the beginning of the semi-structured interviews, a problem because the results of the log phase formed part of the questioning inherent within the interview schedule. Therefore content analysis, a quick method, was conducted to ensure that all of the data were adequately analysed in time for the beginning of the subsequent research phase.

A difficulty inherent in the use of the daily log data collection method, and particularly with the use of online collectors, is that individual tone of speaking is often removed from individual responses in a way which does not occur with semi-structured interview techniques. With hand-written logs some tone was clear through the data collected in that respondents could capitalise, underline, highlight, italicise etc data that needed to be emphasised. This is much more difficult with online methods where capitalising was the only technique in which tone could be conveyed. Therefore during the data analysis methodology equal weight was given to each mention of a phenomenon, with scores represented in **Table 23**.

As per the actual content analytical technique utilised, a simplified version of the methodology used by McIntyre, Horn and Matsuo (2008) in their study of daily hassles was implemented in order to complete the analysis. The process began therefore with each set of responses being read three times once the collector had closed in order to gain an understanding of some of the categories which may emerge from the data. Through a fourth reading a number of categories were developed (and coded in NVivo) to reflect the common themes, and a fifth more detailed reading meant any more sub-themes that would otherwise have been missed were picked out. Also within this fourth and fifth reading a tally was kept of each time each particular theme was mentioned, leading

to outcomes from **Table 23**. This table represents the number of times each particular theme came up, with just the most often mentioned included.

4b) Qualitative Data Analysis (Semi-Structured Interviews)

4b.1) Thematic Analysis

The semi-structured interviews conducted as part of the AI process were analysed using a thematic analysis. Qualitative data collection analysis methods are diverse and complex (Braun & Clarke, 2006), with thematic analysis one of the least recollected yet most widely-used method (Howitt & Cramer, 2011). Thematic analysis is a method used by qualitative researchers for the identification and reporting of themes or patterns within a data set. Indeed Howitt and Cramer (2011) suggest that the task of the thematic analytical researcher is to adequately identify themes which represent the data collected in the form of interviews, focus groups or other textual material. When conducting analysis of qualitative data in this way the goal of the researcher is to identify a number of themes which best represent the essence of the data it seeks to analyse.

Within thematic analysis the end goal is to draw out the overarching themes from within a data set with these themes representing the general concepts that have emerged from an analysis (Langdridge & Hagger-Johnson, 2009). However thematic analysis differs from other qualitative methods such as Interpretive Phenomenological Analysis (IPA) and Grounded Theory which seek to identify patterns in the data which are theoretically grounded. Thematic analysis does not take the same theoretical underpinnings as used in either of the two aforementioned methods which mean that it can be more widely used by both experienced and novice

researchers alike. Despite thematic analysis being widely used and reported in academic literature there is no widely held agreement as to how the analytic process is conducted (Braun & Clarke, 2006).

The analytical procedure followed for the analysis of semi-structured interview data within the presented research was based on that suggested by Braun and Clarke (2006), with the authors suggesting that thematic analyses should go through six phases. How each of these six phases were followed is shown in **Table 7**. The first of these is for the researcher to *familiarise themselves with the data*, in which they immerse themselves in the data, seeking to familiarise with as much of the content as possible. Indeed this familiarisation with the data is an essential element of the thematic process (Howitt & Cramer, 2011). Immersion can be ensured in a variety of ways, including transcription of interviews, re-reading of transcripts, and 'actively reading' transcripts in an attempt to pick out and discover early patterns and meanings which emerge from the data. Phase 2 of the interview data analysis was the *gathering of initial codes*. From actively reading within Phase 1 an understanding of some of the potential themes (or codes) emerging from the data had been gathered, as well as notes as to what is interesting about each of these potential themes. As such Phase 2 is the beginning of the collection of codes which appear from the data to be of interest. Data needs to be coded in a systematic manner, allowing for as many themes and patterns that emerge as possible.

The third of the six phases is titled by Braun and Clarke (2006) as '*searching for themes*'. Therefore once the data has been coded, this phase attempts to sort the codes into broader themes, thus collating all relevant and related codes into overarching themes. As such the relationships between codes and themes now become important, as well as determining whether a theme is first level (i.e. an overarching theme) or secondary (i.e. a subsidiary theme). Phase 4, *reviewing themes*, reflects the refinement of the set of themes that you have gained

in previous phases, as well as the sorting of themes into two levels of analysis. The first of these is where the extracts accompanying a set of themes are read to ensure that they form a coherent pattern. If the theme itself is an issue then it can be re-worked, or if the extract used is an issue then a new theme is found for it. Once agreement on this level of processing is reached the second level considers whether the existing themes accurately and validly reflect the data set as a whole. This also allows for the coding of any additional themes which may have been missed in previous attempts.

The fifth stage, *defining and naming themes*, is where the 'essence' of each theme is laid out and a detailed written analysis of the meaning of each is made. In this stage the researcher must present the story of each individual theme, but also how each fits into the overall story of the data set and whether any of the themes have sub-themes which need to be explored too. The sixth and final stage is *producing a report*, where the complicated story of the data is exhibited and explained to the reader.

Table 7: how the presented study followed each of the six suggested steps for thematic analysis (Braun & Clarke, 2006).

Phase	Description of the Process in Presented Research	
1	Familiarise yourself with the data	Data was transcribed verbatim within 3 days of each interview to ensure closeness. Transcripts were read three times each to gain further closeness and initial ideas from the data noted in NVivo.
2	Generating initial codes	The presented study involved a data-driven analytical approach, in which the data analysis was driven by the questions asked of participants. The work was coded systematically, sentence-by-sentence, in order to generate initial codes.
3	Searching for themes	Themes were sought by bringing together all of the notes from previous phases as well as the codes from the second phase. Predominant and

		related themes were combined into either overall themes or secondary/subsidiary themes. Also the relationships between each of the overarching themes were noted.
4	Reviewing themes	The first task of this phase was to make sure that quotes which accompanied the themes found were clear, and where necessary theme/quote amalgamations which did not make sense were re-written.
5	Defining and naming themes	During this phase the detailed explanations given to themes (and critically discussed in Chapter VIII Part 2: Interview Results) were given, ensuring that they clearly represented what each theme was. Also how each theme fits into the overall questions asked in the project was discussed.
6	Producing the report	The outcomes of the thematic analysis are brought together in this stage. Therefore ensuring that descriptions and accompanying quotations clearly represent each theme, as well as how each theme fits into the overall question asked in the work, is described.

Table 7 describes how each of the steps suggested by Braun & Clarke (2006) for the successful carrying out of thematic analysis were integrated into the thematic analysis of the semi-structured interviews in the presented study. Closeness and familiarity to the data was gained via primarily transcription of semi-structured interview digital recordings and repeatedly reading the transcripts - this also helped to gain initial ideas for potential codes and themes. Step 2 presents the thematic analysis as being data-driven, meaning that the data was coded around the questions asked of participants (Braun & Clarke, 2006). In order to generate initial codes the transcripts were worked through sentence-by-sentence, noting each time codes were presented.

The third phase began by analysing each of the various codes that had been discovered in previous phases. A number of codes were deemed to be strongly related to each other, with those doing so joined to make various

overall themes. Others were deemed to be subsidiaries of the main themes, and formed 'branches' from these. Lastly for this phase any other relationships between the main themes were noted and considered. The next phase of the analytical process was to find clear and coherent quotation examples which illustrated the themes' purpose. Also any themes which seemed out of place, and did not have powerful supporting examples, were re-written or discarded.

The second to last phase of the analytical process, entitled 'defining and naming themes' is where detailed explanations of each of the overarching (or main) themes were given. Therefore a clear description of what each theme means as well as how they relate to other themes identified and the overall message within the data. A discussion was also given as to how the identified themes helped to answer the questions asked of participants. Lastly a detailed report, as observed in **Chapter VIII Part 2 (Interview Results)**, was put together for each theme as well as how these themes addressed the main questions asked.

5) Ethics in the Current Study

An essential element of any research process is ensuring correct methods of researching, analysing and disseminating data, thus demonstrating an appreciation of the importance of ethics. The original conceptualisation of this study, an Action Research-based methodology, received Anglia Ruskin University ethical clearance in the year 2009 due to run for a period of three years. However, the subsequent alteration of research methodologies as well as a change in the number of individuals due to take place meant that further ethical clearance was necessary. Therefore new ethical approval was sought, and gained, via the Anglia Ruskin University ethics degrees committee.

The potential ethical issues foreseen during the approval process included potential distress during interviews or focus groups: workplace stress has the potential to be an emotive, personal, and potentially distressing subject and it is possible that should issues such as bullying be brought up then individuals may be adversely affected. However, the adherence to AI beliefs and values means that there is to be a focus on the positive aspects of working as opposed to the negative and thus it is less likely that issues such as bullying are to be brought up. Despite this, should these issues be mentioned during the interview or focus group process and the participant become overly distressed then that part of the research procedure would be halted and the participant removed from the situation and brought to place in which they feel comfortable. The participating organisation then has a number of standardised procedures developed to help deal with issues such as stress. These processes would therefore be followed and the organisation's well-being officer informed.

A second potential source of ethical concern may have been due to tension between individuals during the focus groups. One of the most important roles for moderators in the focus group phase is to implement a set of ground rules which should minimise these tensions, as well as having responsibility for ensuring the smooth running of the group and addressing any areas of concern such as tensions between individuals in an effective manner. Additionally, and in a similar vein to the interviews, there was a positive focus during these group interviews making it less likely that contentious issues are put forward. However, should tensions have become too high and/or individuals became too distressed the group would have been halted, affected individuals brought to a place in which they feel comfortable, and appropriate procedures followed before informing the organisation's well-being officer.

Complete anonymity and confidentiality throughout the questionnaire, log and interview phases were essential. With the first two of these stages anonymity was ensured in two ways: individuals either completed the questioning for each stage online with no personally identifiable mentioned, or individuals completed a hard copy and returned via stamped addressed envelope to Jermaine Ravalier at Anglia Ruskin University, again without the inclusion of any personally identifiable information. Simply by taking part in the survey and log elements of the study individuals had given consent to take part, and they were informed numerous times previously as to the nature of these studies.

Informed consent was gained for the focus groups and interviews by initially explaining the nature of the study, and asking individuals to complete a consent form should they wish to take part. Additionally participants were given a copy of an Information Sheet specifically designed for these two stages. Anonymity for interview participants was assured by data kept in a locked cupboard on premises outside of the participating organisation, and no identifiable information kept on the recordings of the interviews (which were kept in hidden, password-protected files on two separate personal computers). Additionally, when interviews were transcribed no identifiable information was included and neither was any personal information contained. Confidentiality was ensured during the focus groups by making one of the ground rules at the beginning that 'what stays in this group meeting stays in the group meeting', and again any analysis of the group work was anonymised by removing any personally identifiable information. Finally, individuals were offered the opportunity to withdraw information from the interview phase at any time. The same offer was not made for the previous phases however, due to the lack of personally identifiable information recorded during these processes.

Chapter VII:

Survey Results

Chapter VII: Survey Results

The previous chapter (**Chapter VI: Methodology**) critically discussed the manner in which the methods used in the study were carried out. Following from this, the present chapter presents the results of the quantitative element of this study, used to gain an objective, valid and reliable understanding of the issues facing employees in the participating department of the organisation. This phase consists of two questionnaires designed to fit into one survey; the Management Standards Indicator Tool (MSIT, see **Chapter VI, Section 2a**) as a measure of psychosocial hazards and the Maslach Burnout Inventory-General Survey (MBI-GS, see **Chapter VI, Section 2b**) as a measure of health impact.



Phase 5

1 month

present study has progressed, with Phase 1 (highlighted) the focus of the beginning of the current chapter, and Phase 5 making up the second half (Phases 2-4 are reported in succeeding chapters).

As the diagram suggests Phase 1 and 5 each lasted 1 month (just over 4 weeks), and there was approximately 12 months in between the two phases. The administration of the tool twice allowed the project to determine any changes in the organisation which have occurred over a number of months, which may be particularly important in the ever-dynamic situation that public-sector organisations currently find themselves.

1) Phase 1: Demographics & Descriptive Statistics

1a) Overall Stress Survey

1a.1) Participants

The tools (see *Appendix 3*) were distributed using either the Survey Monkey link sent to staff using an email sent to employees' work email addresses (see *Appendix 4* for a copy of the email sent to 161 of the 188 potential participants, 85.6% of all staff), or via hard copy (see *Appendix 5* for an example of the hard copy letter sent to the remaining 14.4% staff members in the participating service).

Of the 27 hard copy requests sent to all eligible employees, 13 responded and took part in this section of the study. This is a response rate of 48.2% for the potential 'hard copy' employees. With the email version 118 employees responded, a response rate of 73.3%. As such the overall response rate was 131 out of 188 requests, 69.7%.

Table 8: Percentage demographic results of those who completed the survey

Age	N (%)	Employment Length	N (%)	Sex	N (%)
<i>20 or under</i>	0 (0%)	<i>Under 6 months</i>	1 (0.8%)	<i>Male</i>	42
<i>21-30</i>	14 (10.7%)	<i>6-12 months</i>	2 (1.5%)		(32.1%)
<i>31-40</i>	23 (17.6%)	<i>1-3 years</i>	9 (6.9%)	<i>Female</i>	61
<i>41-50</i>	39 (29.8%)	<i>3-5 years</i>	13 (9.9%)		(46.5%)
<i>51-60</i>	30 (22.9%)	<i>5-10 years</i>	38	<i>Prefer not to say</i>	15
			(29.0%)		(11.5%)
<i>61 and above</i>	7 (5.3%)	<i>10 years and above</i>	49		
			(37.4%)	<i>No response</i>	13 (9.9%)
<i>Prefer not to say</i>	8 (6.1%)	<i>Prefer not to say</i>	9 (6.9%)		
<i>No Response</i>	10 (7.6%)	<i>No response</i>	10 (7.6%)		

Table 8 above shows the demographic information for all of those who took part in the overall survey of the participating service. It was made clear that each of these questions were not compulsory to answer, meaning individuals had a choice either not to log a response or “Prefer Not to Say” as well as the available responses. Additionally, each of the categories was chosen because they fit into the approaches used in previous organisational surveys. While 15 employees decided not to state their gender and 12 did not respond, the majority of respondents were female (46.6%, n=61) with 32.1% (n=42) male responses. With respect to the ‘Age’ category, most respondents were 41-50 years of age (29.8%; n=39) while no respondents were 20 or under. Finally, the Length of Employment demographic noted that the majority of respondents had 10 years service or more, while just 1 individual had worked for the PAO for less than 6 months.

1a.2) Descriptive Statistics

Initial results from the overall participant response for the MSIT (**Table 9**) identified that there is “clear need for improvement” on five of the seven factors measured, with the remaining two “good, but need for improvement” when compared to normative baseline data (see *Appendix 6* for further details of MSIT analysis tool results). Therefore it was assessed that none of the seven factors were at the optimum level for the organisation.

Table 9: Management Standards Indicator Tool analysis tool outcomes and suggested targets for the near future and longer-term targets.

	Demand s	Control*	Manageria l Support	Peer Support	Relationsh ips*	Role	Chan ge
Mean Scores	3.03	3.68*	3.44	3.75	3.87*	4.09	3.01
(SD)	(.65)	(.74)	(.85)	(.68)	(.68)	(.58)	(.93)
Suggested Target[^]	3.10	3.72	3.48	3.80	3.944	4.17	3.08
Long Term Targets[‡]	3.29	3.72	3.65	3.89	4.04	4.31	3.24

*Control and Relationships – the two factors classed as ‘Good’, according to Health and Safety Executive standards.

[^]Suggested targets are short term goals as to how the organisation can be improved according to Analysis Tool outcomes.

[‡]Long term targets are ideal outcomes for the organisation according to Analysis Tool outcomes.

Table 10 indicates the average overall score that all individuals received on the Maslach Burnout Inventory-General Survey as well as the standard deviation and the threshold levels of scoring identified as being high, moderate or low for each of the three factors. The Exhaustion category had an overall average score of 11.23 (n=126, SD 7.81), with results indicating that the respondents are overall within the ‘Moderate’ category. The Cynicism score was 9.11 (n=126, SD 7.48), again putting the average score approximately in the middle of the ‘Moderate’ level. Finally Professional Efficacy was found to average 11.66 (n=126, SD 6.63), which indicates ‘Low’ average scoring on this factor.

Table 10: Mean scores and standard deviations for all participants who completed the Maslach Burnout Indicator-General Survey.

	Exhaustion	Cynicism	Professional Efficacy
Mean Scores	11.23	9.11	23.53
Standard Deviation	7.81	7.48	6.71
Threshold Scores for Burnout			
High	16 or over	13 or over	30 or over
Moderate	8-15	6-12	24-29
Low	0-7	0-5	0-23

*Professional Efficacy is scored in the opposite direction to the other two factors.

According to the conceptualisation by Maslach et al. (1986), high levels of Exhaustion and Cynicism and low levels of Professional Efficacy traditionally characterise indications for Burnout (see **Table 10**). Additionally, it must be taken into account that PE is scored in the opposite direction to CY and EX. Therefore a high score on PE indicates a high level of Professional Efficacy (i.e. positive, individuals feel they achieve many social and non-social accomplishments at work, a positive outcome), whereas a high score on the other two indicates a high level of both Cynicism (i.e. negative, an indifferent attitude towards work) and Exhaustion (i.e. negative, a draining of resources from work; Lindblom et al., 2006). Overall, respondents scored moderate on all three MBI factors. Therefore according to the baseline scoring set by Maslach et al. (1996), the overall group did not score high on burnout.

Organisationally, therefore, the survey supported moderate levels of burnout. However, standard deviation values suggest the presence of at least some individuals whose survey scores exceed threshold limits for

Exhaustion and Cynicism, thus indicating more serious levels of Burnout (see **Table 10**). This is explored further in a later **Section 2c**.

1a.3) Reliability Analyses

Reliability analyses via Cronbach's Alpha calculations were produced in order to further ascertain suitability of scale use within the present population. The MSIT has previously been found to be inherently reliable by both Cousins et al. (2004) and Edwards et al. (2008) when the tool was administered to a wide variety of individual employees from a wide variety of UK organisations (see **Table 5**). Similarly Langbelle et al. (2006) found the MBI-GS to be reliable in a large range of job roles, with just Professional Efficacy among a population of bus drivers having a Cronbach's alpha value below the accepted 0.7 level (Cronbach, 1951; see **Table 6**).

Table 11: Reliability results via Cronbach's alpha for each factor in the MSIT and MBI-GS

Management Standards Indicator Tool	Cronbach's α	Maslach Burnout Inventory-General Survey	Cronbach's α
Demands	.85		

Control	.85	Exhaustion	.93
Peer Support	.76		
Managerial Support	.88	Cynicism	.89
Relationships	.79		
Role	.80	Professional Efficacy	.83
Change	.83		

Present study Cronbach's alpha results (see **Table 11** above) mirror the results of studies as previously reported. Each factor in the MSIT and MBI-GS was found to be inherently reliable at the accepted 0.7 level. This therefore suggests that both have a good level of internal consistency within the working population of Service 6.

2) Phase 1: Inferential Statistics: MSIT and MBI-GS

Simple descriptive analysis using benchmark data suggested that individuals in Service 6 may be experiencing a working environment which is conducive to strain outcomes within the working population, but overall most of the sample were not experiencing Burnout as a consequence of chronic stress. However, while simple 'eyeballing' of results may suggest a lack of an impact of stressors on strain outcomes, more detailed statistical analysis is also required.

2a) Bivariate Analysis

Bivariate analyses were conducted in order to investigate the basic relationships between the factors on the MSIT and MBI-GS respectively. Pearson's correlations indicate whether or not a statistically significant relationship is observed between variables.

Table 12: Pearson's correlation Bivariate results for MBI-GS vs. MSIT variables.

	Deman ds	Control	M. Support	P. Support	Relationshi ps	Role	Change
Exhaustion	.55**	-.11	-.38**	-.31**	.27**	-.37**	-.30**
Cynicism	.31**	-.19	-.50**	-.43**	.39**	-.55**	-.59**
Professional Efficacy	.11	.44**	.52**	.42**	-.28**	.39**	.44**

Note: a .01 significance level used in order to minimise risk of Type 1 error.

**Correlation is significant at the 0.01 level.

Correlational analyses (**Table 12**) suggest that each factor has at least one statistically significant association at the 0.01 level. Indeed, Managerial Support, Peer Support, Relationships, Role and Change were each found to be statistically significantly associated with all three of the factors within the MBI-GS. Additionally, Demands was found to be significantly related to Exhaustion and Cynicism on the MBI-GS, while Control was significantly associated solely with Professional Efficacy. Similarly, both Exhaustion and Cynicism were found to be statistically related to six out of the seven MSIT factors with Control the only non-significantly associated factor, whereas Professional Efficacy was related to each factor apart from Demands.

These results would therefore suggest that five of the MSIT factors influence each of Exhaustion, Cynicism and Professional Efficacy, whereas Control and Demands related to Exhaustion/Cynicism and Professional Efficacy, respectively. Similarly the results suggest that each MBI-GS factor influences six of the seven MSIT variables. However, while correlational analysis looks at the relationship between two given variables, a regression is also to be used in order to predict the performance of one variable (DV) when the second is manipulated (IV). Therefore while the correlational results above suggest that there are multivariate MSIT influences on each of the MBI-GS

factors, it does not describe any areas as dominating these outcomes. Therefore a more complex and comprehensive analysis using multivariate linear regression analysis is to be described next.

2b) Linear Regression

2b.1) MSIT Factors as Independent Variable

Table 13 below shows the results of stepwise linear regression analyses conducted on total scores from the MSIT and MBI data. Multiple linear regression analyses were conducted with the seven MSIT factors acting as independent variables against the three MBI-GS factors in order to determine the direction of relationship, i.e. with workplace hazards impacting upon mental health outcomes.

Table 13: Multivariate linear regression results of the present study, indicating how the factors inherent within the MSIT (as independent variables; IV) perform against those in the MBI-GS (as dependent variables; DV)

Tool	Factor (DV)	Significantly Related Factors (IV)	Coefficient Estimate (B)	T	P	R ²	Adjusted R ²	Tolerance	VIF
Maslach Burnout Inventor	Exhaustion	Demands	.767	7.89	.001	.341	.331	.980	1.021

y- General Survey		Control	-.291	-2.67	.009				
	Cynicism	Role	-.980	-3.94	.001				
		Change	-.772	-4.99	.001	.415	.406	.703	1.423
		Managerial Support	.655	4.85	.001			.651	1.536
	Professional Efficacy	Role	.467	2.42	.017			.678	1.475
		Control	.361	3.41	.001	.431	.413	.861	1.162
		Demands	.307	3.23	.002			.836	1.196

Table 13 above therefore shows the results of Linear Regression analyses with psychosocial hazards as measured by the MSIT (IV) acting as the variables which may associate with stress-related outcomes as measured by the MBI-GS (DV). An assumption of multiple regression analyses is that the factors being assessed are not co-correlated with one another, thus indicating that they are not measuring the same thing. In this respect VIF (Variance Inflation Factor) values (which check for collinearity) for variables should be fewer than 5 (Denis, 2011) and therefore Tolerance above 0.2 (as $Tolerance = 1/VIF$) in order to be clear that there are differences between the predictors. There is some scepticism as to the use of clear cut off data for VIF (and therefore Tolerance), with

statisticians recommending use of values up to 40. However, O'Brien (2007) argues that even if either Tolerance/VIF are violated other statistics should still be taken into account. It can therefore be confidently assumed from the results of **Table 13** that there are clear differences between the factors inherent within the DV and IV for each regression model, and they are not measuring the same concept.

Pearson's correlational analysis (**Table 12**) suggested that the MBI-GS factor of Exhaustion is significantly correlated with all MSIT factors apart from Control ($p < 0.01$). However, primary regression analysis suggested that 39% of variability is accounted for ($R^2 = .389$) with just Demands and Control forming significant relationships with Exhaustion at the .05 level. Upon removal of the non-significant factors the revised R^2 value is only slightly reduced to .341, thus the adjusted model represents approximately 34% of variance, so supporting a two-factor construct for Exhaustion. Beta coefficients suggest that Demands (.767) had a had a stronger association with Exhaustion than did Control (-.291).

Initial Pearson's correlation also suggested that Cynicism from the MBI-GS is significantly correlated to each of the factors inherent within the MSIT apart from 'Control' at the accepted .01 level. However, primary multivariate linear regression analysis suggested that only Demands, Role and Change were significantly related to Cynicism at a minimum .05 significance level, with 45% of variance explained ($R^2 = .451$). Further secondary regression analysis, having removed the non-significant factors, suggested that tolerance levels for each of the three included factors (Demands, Role and Change) were now acceptable indicating that they are acting independently of other areas, with 44% of variance still explained ($R^2 = .443$). Beta coefficient results suggested a very weak relationship for Demands (.228) with Cynicism when compared to Role (-.645) and Change (-.989), and therefore a tertiary regression analysis was conducted with Role and Change acting against Cynicism. This final

analysis indicated that both were highly significantly related to Cynicism ($p < .01$), with 41% of variance still explained still by the model ($R^2 = .415$). This shows a 3-factor model for Cynicism is intimated, but Role and Change are the predominantly associated factors.

Lastly, initial regression analysis with Professional Efficacy acting as the Dependent Variable suggested that each of Demands, Control and Managerial support were significantly related at the .01 level, with Role significantly related at the .05 level. Also, each had tolerance levels above .50 and 43% variance was explained ($R^2 = .436$). Secondary analysis involving just these four factors suggested each of Managerial Support, Control and Demands were significantly correlated at $< .01$, and Role $< .05$ with an R^2 value still of .431. Lastly there was not one factor for which Beta coefficients stood out (with a range of .307 to .655) and so there was no justification for further analysis. It would appear that Managerial Support, Control and Demands were therefore the predominantly associated factors in Professional Efficacy.

2c) High and Low Burnout Populations

As depicted in **Table 14** the MBI-GS assumes threshold scores for participants, allowing researchers to determine those with High levels of burnout. Therefore should an individual score 16 or more on Exhaustion, 13 or more on Cynicism, and fewer than 24 on Professional Efficacy these individuals would be described as suffering from Burnout.

Table 14: Raw threshold scores on each MBI-GS factor indicating high and low levels of burnout.

	Exhaustion	Cynicism	Professional Efficacy
Threshold Scores for Burnout			
High	16 or over	13 or over	30 or over
Moderate	8-15	6-12	24-29
Low	0-7	0-5	0-23

Simple case selection of just those individuals whose MBI-GS scores indicate a high burnout outcome, suggest that there are 15 employees who took part in Survey 1 who are suffering from Burnout, i.e. scoring high on each of Exhaustion and Cynicism, and low on Professional Efficacy. Therefore of those taking part in the study, 11.5% are suffering from Burnout, as discussed by Maslach & Jackson (1996). This would equate to 8% of the entire population of Service 6. As per a method of comparison, all cases in which a high score is gained in any of the three factors (i.e. 16 or above on Exhaustion, 13 or above on Cynicism, or 23 or less on Professional Efficacy) identified were excluded from the data set. This left 51 employee scores remaining who showed no evidence of Burnout at all, relating to 38.93% of the participating organisation and 27.13% of all Service 6 employees. The following analysis assesses whether or not there are differences between those groups identified as suffering from 'high' burnout (and therefore high Exhaustion, high Cynicism and low Professional Efficacy) and those without any burnout factor outcomes, i.e. sub-threshold scores for all 3 factors.

2c.1) High vs. Low MBI-GS Scorers

Burnout has often been presented as a potential outcome for chronic workplace stressors (e.g. Pierce and Molloy, 1996; Gorter, 2007, see **Chapter 3, Section 1b.4.3**). **Table 15** shows the mean and standard deviation scores on the MSIT for participants who were found to be experiencing both high and non-high burnout symptoms. It should be noted that 'Relationships' and 'Demands' are scored in the opposite direction to the remaining five outcomes. The table also shows the results of independent samples T-Tests to assess the differences in burnout scoring between the 'high' and 'low' groups.

Table 15: Independent Samples T-Test results indicating differences between the High Scoring and Low Scoring MBI-GS groups on MSIT outcomes.

MSIT Factor	Sample Population (MBI Scoring)	Mean (n)	Standard Deviation	t	Degrees of Freedom	Sig. (2-tailed)
<i>Demands</i>	<i>High Scoring</i>	26.27 (15)	5.74	2.721	64	.008
	<i>Low Scoring</i>	22.14 (51)	4.99			
<i>Control</i>	<i>High Scoring</i>	19.60 (15)	4.22	-2.879	64	.005
	<i>Low Scoring</i>	23.31 (51)	4.44			
<i>Managerial Support</i>	<i>High Scoring</i>	13.00 (15)	3.38	-5.953	64	.001
	<i>Low Scoring</i>	19.27 (51)	3.64			
<i>Peer Support*</i>	<i>High Scoring</i>	12.80 (15)	3.59	(U) 160.50	17.920	.001
	<i>Low Scoring</i>	16.20 (51)	2.43			
<i>Relationships</i>	<i>High Scoring</i>	9.80 (15)	3.73	2.960	64	.004
	<i>Low Scoring</i>	7.55 (51)	2.17			
<i>Role</i>	<i>High Scoring</i>	17.67 (15)	2.82	-5.541	64	.001
	<i>Low Scoring</i>	21.69 (51)	2.36			

<i>Change</i>	<i>High Scoring</i>	6.93 (15)	1.83	-5.428	64	.001
	<i>Low Scoring</i>	10.53 (51)	2.36			

*Equality of variances not assumed. Therefore non-parametric Mann-Whitney U results reported.

Results as displayed in **Table 15** show that there are significant differences in the mean scores between the two samples extrapolated from the data. As would be expected, for each of the five factors which are scored in the same direction (i.e. positively phrased) the non-high scoring groups on average scored higher than those assumed to be suffering from burnout. Similarly for those found to be undergoing a high level of burnout scores were higher for the remaining two factors: Demands and Relationships.

There are clear significant differences between the two groups on each of the seven MSIT factors (all $p < .01$). This therefore suggests that those with high levels of scoring in the MBI-GS were experiencing significantly higher levels of psychosocial workplace hazards than those in the low group. However, it must also be noted that for the Peer Support factor on the MSIT equality of variances were not assumed. Despite this a non-parametric Mann-Whitney U test was conducted and a significant difference was still supported.

3) Phase 5: Demographics & Descriptive Statistics

3a) Overall Stress Survey

3a.1) Participants

Table 16 shows the demographic information for those who took part in Survey 2 (conducted approximately 12 months after Survey 1), which again consisted of completion of the 35-item Management Standards Indicator Tool and the 16-item Maslach Burnout Inventory – General Survey. All employees within the participating organisation were sent email invitations containing secure links to the survey, with the online collector kept open for four weeks. After weeks 2 and 3 prompting emails were also sent to all employees in order to attempt to increase the response rate. It is worth noting that due to the outcomes of the presented research and interventions therefore implemented (see **Chapter IX, Section 3d**), all employees now had work email addresses as well as regular access to computers in the workplace. Similarly employees could now access their work emails from home computers, meaning there was no reason to send out hard copies of the survey unless requested. The total number of employees within this part of the organisation had also reduced from 181 to 106 over the 12 month time period between Surveys 1 and 2 as a consequence of voluntary and compulsory severance. Therefore with 57 respondents to Survey 2 a response rate of 52.8% was gained. As such the response rate of Survey 2 is 16.9% lower than that for Survey 1.

Table 16: demographic information for Survey 2 data results.

Age	N (%)	Employment Length	N (%)	Sex	N (%)
20 or under	0 (0%)	Under 6 months	1 (1.8%)	Male	24 (42.1%)
21-30	4 (7%)	6-12 months	1 (1.8%)	Female	30 (52.6%)
31-40	11 (19.3%)	1-3 years	2 (3.5%)		

41-50	13 (22.8%)	3-5 years	0 (0%)		
51-60	21 (36.8%)	5-10 years	20 (35.1%)	Prefer not to say	2 (3.5%)
61 and above	4 (7%)	10 years and above	28 (49.1%)		
Prefer not to say	3 (5.3%)	Prefer not to say	4 (7%)	No response	1 (1.8%)
No Response	1 (1.8%)	No response	11 (1.8%)		

The demographic information presented in **Table 16** shows that respondents were of a wide age range, with the majority aged between 51 and 60 years. Indeed the vast majority of respondents were aged between 31 and 60, with just 11 (19.3%) respondents outside of this age range. Again with the length of employment demographic it is clear that the majority of respondents had been working for the organisation for a long period of time, with 84.2% having been employed within Service 6 for greater than 5 years. It is also interesting to note that 15 respondents (26.3%) either did not want to disclose, or did not disclose, the length of employment in the organisation, considering that just 7.1% of 'Age' and 5.3% of 'Sex' respondents did not disclose this information. Lastly, with regard to gender there was a relatively even split between the number of male ($n = 24$, 42.1%) and female ($n = 30$, 52.6%) respondents.

A series of chi square tests for independence were conducted on demographic data in order to examine the population differences between Survey 1 and Survey 2. The relationship between the 'Age' category in the two surveys was not significant, $\chi^2 (6, N=179) = 5.12, p = .530$, as was that for gender ($\chi^2 (4, N=179) = 6.20, p = .185$). However, there was a significant difference in the length of employment category, $\chi^2 (7, N=179) = 37.69, p = .001$.

3a.2) Descriptive Statistics

Management Standards Indicator Tool analysis shows that there is just one ‘psychosocial hazard’ which can be is working well from Survey 2 outcomes (see *Appendix 13*). There are also 3 areas in which there is ‘clear need for improvement’ and a further 3 for which there is ‘urgent need for action’. This therefore indicates that none of the 7 areas measured as working to their greatest potential, and also means participants are likely to experience stressors as measured by these areas. When compared to Survey 1 (see **Section 1a.2** of this chapter), each of the 7 average scores for the psychosocial areas are lower for Survey 2 and while two areas were found to be working well in Survey 1, only one was found in Survey 2. Worryingly however three areas in Survey 2 were in need of urgent action, whereas none were found to be so in Survey 1. This indicates a deterioration of psychosocial working standards over the 12 month period.

Table 17: Survey 2 MSIT analysis tool results, indicating areas working well as well as those requiring improvement.

	Demand s*	Control	Manageria l Support	Peer Support	Relationsh ips*	Role	Chan ge
Mean Scores (SD)	2.85 (.65)	3.52 (.82)	3.09 (.96)	3.64 (.72)	3.62 (.81)	3.73 (.72)	2.82 (1.10)
Suggested Target	3.00	3.60	3.34	3.71	3.76	4.07	2.99
Long Term Targets[‡]	3.29	3.72	3.65	3.89	4.04	4.31	3.24

*Denotes reversed scoring.

Table 18 shows that among respondents the levels of Exhaustion, described as a ‘draining of resources’, and Cynicism, described as an indifferent or distant attitude toward work, are both far above the highest threshold

score as described by the original authors. This therefore indicates that, as a whole, the respondents are high in both Exhaustion and Cynicism. In contrast however, Professional Efficacy also scored very high (just .7 away from being labelled as 'high'). Due to the reversed phrasing of items this is a positive outcome, meaning that respondents felt that they had good social and non-social accomplishments at work, despite high Exhaustion and Cynicism.

Table 18: Mean MBI-GS scores for participants from the second survey.

	Exhaustion	Cynicism	Professional Efficacy
Mean Scores	20.18	15.96	29.30
Standard Deviation	7.16	7.02	6.70
Threshold Scores for Burnout			
High	16 or over	13 or over	30 or over
Moderate	8-15	6-12	24-29
Low	0-7	0-5	0-23

When compared with Survey 1 MBI-GS scores, Survey 2 results appear more extreme in each of the three factors measured. While Exhaustion and Cynicism both scored 'High' outcomes in Survey 2 when compared with 'Moderate' in Survey 1, Professional Efficacy also scores a much higher score. Simple 'eyeball' comparison of the outcomes from Surveys 1 and 2 in the MSIT and MBI-GS, as well as the demographic data, suggest that the organisational situation has shifted dramatically over the 12 months that the research took place. In order to discover significances however, proceed to **Section 5**.

4) Phase 5: Inferential Statistics: MSIT and MBI-GS

4a) Bivariate Relationships

Bivariate relationships between each of the factors inherent on the MSIT and MBI-GS are demonstrated in **Table 19**. Results show a significant relationship between Exhaustion and six of the MSIT factors at $p < .001$, as well as Peer Support at $p < .005$. Similarly statistically significant correlations were found between Cynicism and each MSIT factor apart from Demands (all $p < .001$). Lastly Professional Efficacy was found to be significantly correlated to five of the seven MSIT factors (all $p < .001$) apart from Demands and Control, where no significance was recorded.

Table 19: Bivariate correlations for MSIT and MBI-GS factors from Survey 2.

	Deman ds	Control	M. Support	P. Support	Relationshi ps	Role	Change
Exhaustion	.64**	-.37**	-.42**	-.29*	.36**	-.44**	-.41**
Cynicism	.26	-.44**	-.61**	-.52**	.47**	-.58**	-.69**
Professional Efficacy	.04	.19	.42**	.43**	-.41**	.46**	.52**

Note: a .01 significance level used in order to minimise risk of a Type 1 error.

**Correlation is significant at the 0.01 level.

*Correlation is significant at the 0.05 level.

Similarities between the Bivariate outcomes of Surveys 1 and 2 are demonstrated in that there are significant relationships between the three MBI-GS factors and each of Peer Support, Relationships, Role and Change. Similarly in both surveys Demands and Exhaustion were significantly correlated, whereas no significant association was found between Demands and Professional Efficacy in either survey. Despite this there are also a number of divergent outcomes. For example in Survey 1 significant correlations were found between Cynicism and Demands,

and Professional Efficacy and Control whereas no such correlation was found here in Survey 2. Similarly Survey 2 found statistically significant correlations between Control and Exhaustion as well as Control and Cynicism, whereas no significance was placed on these factors in Survey 1.

4b) Linear Regression

4a.1) MSIT Factors as Independent Variable

In order to discover possible antecedents to burnout stepwise multivariate linear regression analysis was conducted (see **Table 20**). Primary regression analysis showed that Exhaustion was only significantly related to Demands ($p=.001$) and Control ($p=.028$, Adjusted $R^2 = .492$). However, secondary analysis having removed all non-significant MSIT factors (thus leaving Demands and Control) indicated that both had statistically significant relationships with Exhaustion at $p=.001$, with a slightly increased variance explanation of close to 50% (adjusted $R^2 = .498$). Lastly, the model presents Demands as being more strongly related to the experience of Exhaustion ($B = .853$) than does Control ($B = -.479$), an outcome which mirrored the results of the primary regression. This analysis indicates a two-factor construct for Exhaustion, not dissimilar to Phase 1.

Initial regression analysis of the MSIT factors which were related to Cynicism suggested that approximately 45% of variance is explained by the seven MSIT factors, although only Change provided a statistically significant association ($p=.027$) and had a stronger Beta outcome ($-.999$) than any of the other six factors. Secondary analysis following removal of the six non-significant factors provided an increase in each of Adjusted $R^2 (= .498)$,

significance ($p=.001$) and coefficient estimate (-1.481). Change therefore appears to have developed a stronger relationship with Cynicism than it was in Phase 1.

Lastly secondary analysis also indicated that Professional Efficacy was significantly related to just the Change MSIT factor. Primary analysis consisting each of the seven MSIT factors provided a relatively low variance explanation of close to 23% (Adjusted $R^2 = .228$), although none of the seven MSIT factors were found to have a statistically significant relationship. Despite this, Change again had the strongest relationship ($B=.715$, a higher value particularly when compared to the next strongest Beta value for Relationships, $-.284$). Taking the Change factor forward to secondary analysis slightly improved Adjusted $R^2 (= .253)$, and Change became statistically significant ($p<.001$). The Beta value also increased to 1.065. This modelling outcome presents a totally different picture for Professional Efficacy than that in Phase 1.

Table 20: Survey 2 linear regression results with MSIT factors as Independent Variables versus MBI-GS factors as dependent variables.

Tool	Factor (DV)	Significantly Related Factors (IV)	Coefficient Estimate (B)	T	P	R ²	Adjusted R ²	Tolerance	VIF
MBI-GS	Exhaustion	Demands Control	.853 -.479	6.51 -3.49	.001 .001	.516	.498	.996	1.00
	Cynicism	Change	-1.481	-6.97	.001	.469	.459	1.00	1.00
	Professional Efficacy	Change	1.065	4.465	.001	.266	.253	1.00	1.00

Note: a .01 significance level used in order to minimise risk of a Type 1 error.

To summarise, a simple visual comparison of the multivariate linear regression results as depicted in **Table 13** (Survey 1) and **Table 20** (Survey 2) clearly show that the priorities influencing stress-related outcomes indicate similarities and differences. For example, both surveys found that Demands and Control were the main factors implicated with the experience of Exhaustion. Despite this these two factors explained a greater percentage of variance in Survey 2 (Adjusted $R^2=.498$) than they did in Survey 1 (Adjusted $R^2=.331$). Similarly both surveys implicated Change as strongly associated in the experience of Cynicism, and overall both models explained greater than 40% of variance. However Survey 1 also demonstrated that Role was strongly related to Cynicism, an outcome not mirrored in Survey 2. Lastly, the antecedents for feelings of Professional Efficacy were completely different between the two surveys. While Survey 1 found that each of Managerial Support, Role, Control and Demands together explained 41% of variance, Change was the only factor in Survey 2 to do so and thus explaining just 25% of variance.

4c) High vs. Non-High Scorers

Table 21 below shows the differences between those individuals who scored 'high' on overall burnout scores (high levels of Exhaustion and Cynicism, and low levels of Professional Efficacy) and those who did not score highly on either Exhaustion or Cynicism, or low on Professional Efficacy. The table therefore illustrates whether or not a significant difference is demonstrated between the two sub-populations on each of the seven MSIT factors. Analysis identifies significant differences between the two groups on six of the seven MSIT factors, without significance between the groups on the Demands factor alone. As in Phase 1, each of the significant outcomes

provides evidence for the argument that there is a strong relationship between high levels of burnout and high levels of stress-related psychosocial hazards.

Table 21: t-test and non-parametric mann-whitney U test results for high versus non-high scoring MBI participants on the MSIT factors.

MSIT Factor	Sample Population (MBI Scoring)	Mean (n)	Standard Deviation	t	Degrees of Freedom	Sig. (2-tailed)
<i>Demands</i>	<i>High Scoring</i>	25.00 (7)	4.47	1.13	15	.276
	<i>Low Scoring</i>	22.70 (10)	3.89			
<i>Control</i>	<i>High Scoring</i>	18.57 (7)	4.50	-2.48	15	.025
	<i>Low Scoring</i>	23.30 (10)	3.37			
<i>Managerial Support</i>	<i>High Scoring</i>	11.71 (7)	4.42	-4.18	15	.001
	<i>Low Scoring</i>	19.30 (10)	3.09			
<i>Peer Support*</i>	<i>High Scoring</i>	11.43 (7)	3.31	(U) 8	8.65	.001
	<i>Low Scoring</i>	16.10 (10)	1.85			
<i>Relationships*</i>	<i>High Scoring</i>	11.43 (7)	3.82	(U) 7	7.57	.005
	<i>Low Scoring</i>	6.60 (10)	1.65			
<i>Role</i>	<i>High Scoring</i>	15.14 (7)	3.60	-5.26	15	.001
	<i>Low Scoring</i>	22.00 (10)	1.76			
<i>Change</i>	<i>High Scoring</i>	5.14 (7)	1.86	-6.09	15	.001
	<i>Low Scoring</i>	11.40 (10)	2.22			

*Equality of variances not assumed. Therefore non-parametric Mann-Whitney U results reported.

Differences between **Tables 15** and **21** would suggest that the experiences of employees have shifted over the previous 12 months, and that the organisation consists of a dynamic and changeable environment. The major difference between the two phases is the lack of significance between the groups in Survey 2 for the Demands factor. It can therefore be stated that, within the outcomes of Phase 2, the experience of Demands had no significant impact on stress-related outcomes compared with the situation at the time of Phase 1.

5) Phase 1 vs. Phase 5

The purpose of completing a second survey phase within the current study was to gain an understanding of the changes which may or may not have occurred in the organisation in the 12 months between the two surveys. While some differences have already been presented with respect to demographic changes and differences in MSIT factors and MBI-GS outcomes, the present section assesses whether any of the survey outcomes themselves are significantly different. Therefore a non-parametric Mann-whitney U test was completed on the two sets of data for each of the 7 factors within the MSIT and the 3 in the MBI-GS. The non-parametric test was conducted rather than a parametric test because it is assumed that although some of the same individuals would have taken part in Survey 1 as well as Survey 2 the distributions will not be the same.

Table 22: Non-parametric test results for Survey 1 versus Survey 2 on both MSIT and MBI-GS factors.

Factor	Survey Sample (n)	Mean Rank	U	Sig. (2-tailed)
Management Standards Indicator Tool				
Demands*	Survey 1 (128)	87.24	2911.00	.028
	Survey 2 (57)	105.93		
Control	Survey 1 (128)	94.76	3423.00	.502
	Survey 2 (57)	89.05		
Peer Support	Survey 1 (128)	101.82	2519.50	.001
	Survey 2 (57)	73.20		
Managerial Support	Survey 1 (128)	89.16	3156.50	.142
	Survey 2 (57)	101.62		
Relationship*	Survey 1 (128)	90.20	3289.00	.282
	Survey 2 (57)	99.99		
Role	Survey 1 (128)	99.99	2753.00	.007
	Survey 2 (57)	77.30		
Change	Survey 1 (128)	95.81	3288.00	.282
	Survey 2 (57)	86.68		
Maslach Burnout Inventory-General Survey				
Exhaustion	Survey 1 (128)	74.33	1258.00	.001
	Survey 2 (57)	134.93		
Cynicism	Survey 1 (128)	77.19	1675.50	.001
	Survey 2 (57)	126.61		
Professional Efficacy*	Survey 1 (128)	79.42	1958.00	.001
	Survey 2 (57)	121.65		

*Questioning is reversed.

Simply from the mean rank of scores it is clear that there are some large differences in the mean outcomes. Within the MSIT there are just three outcomes which show statistically significant differences between the two survey population results. Comparison of the MBI-GS outcomes however show that there are clear statistical differences between Surveys 1 and 2 in each of the three factors, with the Survey 2 outcomes consistently higher.

With respect to the MSIT outcomes therefore Demands, Peer Support and Role are each significantly higher in Survey 2 than in Survey 1 (when corrected for the direction of scoring). Therefore Survey 2 outcomes show increased levels of Demands ($p < .05$), lower levels of Peer Support ($p = .01$), and a decreased understanding of their role ($p < .05$). Survey 2 respondents also scored worse on both Exhaustion and Cynicism (both $p = .01$). Therefore they felt they had fewer personal resources available in order to do their work, and have a more indifferent or distant attitude toward work. In contrast however, participants scored significantly higher on Professional Efficacy ($p = .001$). This indicates that respondents' social and non-social accomplishments at work have been increased despite a background of increasing Exhaustion and Cynicism.

Chapter VIII Part 1:

Log Results

Chapter VIII Part 1: Log Results

The current chapter is to present the demographic and results from the log stage (Phase 2) of the study. The reasoning behind the implementation of a log phase was to discover the everyday examples of aspects of the workplace which work well and why these elements are working well. Additionally the logs were to investigate the areas of the workplace that were not working as well, in addition to how they could be improved. This stage fits with Phases 1 and 2 of the Appreciative Inquiry (AI) research cycle (see *Figure 9*); 'Discovery' in which positive exceptions and successes are discovered, and 'Dream' in which a new vision for the future is envisioned.

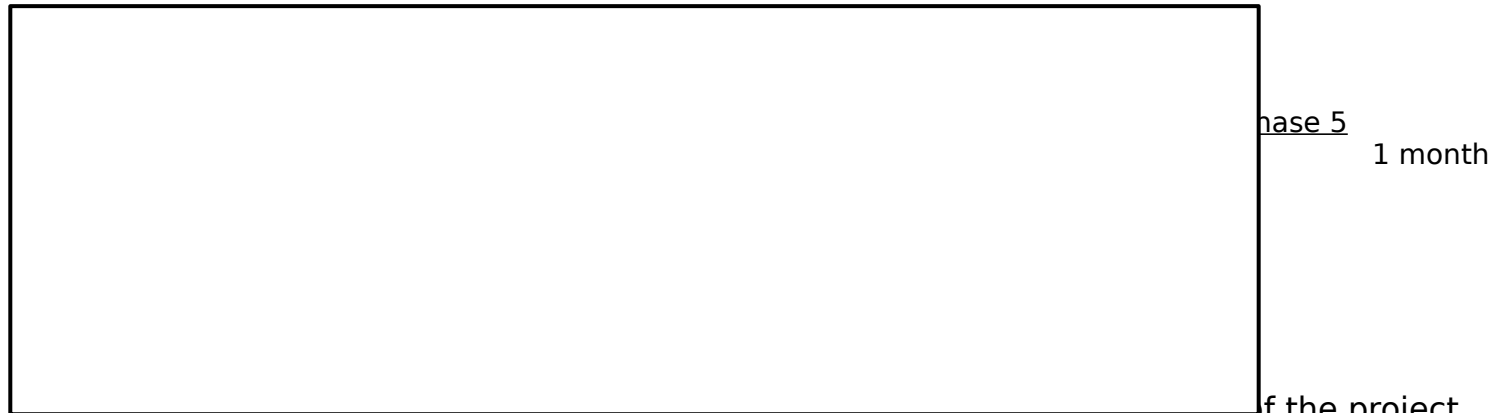


Figure 12 above shows how the logs fit in with the overall structure of the project. Although it is the second phase, the logs are the initial qualitative element of the work and the beginning of the AI cycle. The logs asked participants to answer just four questions, designed to take a minimal amount of time away from individual's working day. This phase lasted just over four weeks, with results suggesting the areas of the workplace which are working well within the participants' working days.

1) Demographics

The log phase of the study consisted of individuals asking four interrelated questions focussing on what's working well in the organisation and why, as well as how areas that were not working quite as well can be improved. Individuals were given the chance to answer the logs in one of two ways, either online using open-ended questioning or hard copies which were sent to individuals without regular access to either staff email or computers. Invitations were sent either by email with an accompanying SurveyMonkey link or via an internal organisational mail system with accompanying stamped-addressed envelopes to be returned to the lead researcher (Jermaine Ravalier) at Anglia Ruskin University.

Similar to the previous stage of the research, online invitations to the log phase were distributed to 161 of the 188 potential participants, with hard copies sent to the remaining 17. At the beginning of the answering of the online logs individuals were asked to provide individual and unique nicknames for each of the log days they completed, possibly based upon their personal interests. There are three primary reasons behind this decision:

- It showed participants that their anonymity is assured – by providing potentially unique names rather than asking for real names there would be no way that the researchers, or others within the competing organisation, could know the identity of the employees who have taken part.
- Due to the set-up of SurveyMonkey combined with the possibility of flexible working (and therefore working from various computers on different days), individual days had to be completed in new SurveyMonkey forms.

Therefore by individuals providing unique nicknames it allows the researchers to put together the responses of each individual for the various days.

- The use of individual nicknames allows the recording of demographic information such as number of participants. Also, due to the anonymity involved, individuals may have been more likely to complete the further demographic information contained in the log forms.

Over the five week period that the SurveyMonkey collector was open individuals volunteered 35 uniquely separate nicknames, with 20 of the 35 individuals volunteering more than one day's worth of information and 10 completing at least one work week's worth of information. Additionally seven days' worth of information was volunteered from individuals who decided not to leave a nickname, so it cannot be deemed whether this information was gathered from one or a number of individuals. In addition to the known 35 online respondents, four hard-copy participants who each completed 10 days took part in the log phase. Therefore out of possible 181 participants, a minimum of 40 individuals volunteered information (assuming that the non-nicknames responses were from just one individual). This means that, when taking into account hard copy and online respondents, a total of 152 days worth of information was gathered.

2) Results

The results of the electronic and hard-copy individual log responses are detailed within section **2) Results**, with responses separated by question. Initially a description as to the number and typology of responses to each question is given, as well as an explanation of the nature of each question. Finally the main and most important findings are given together with example quotations from various participants.

2a) *What's Working Well?*

"What went well in your day?"

The results of the first question asked were gathered in response to the question above, therefore looking to inform the researcher of the areas of the workplace that are working well and possibly looking into systems which can be transferred into areas that are not working as well. A total of 146 days worth of information were collected out of the possible 152 thus representing 96.05% of potential responses. Indeed, just one hard copy respondent did not answer 6 days' worth of information in this particular category. In total 162 separate pieces of information were gathered.

2a.1) **Work Completion**

The experience of being productive and managing to complete pieces of work was one of the most often-cited areas of everyday working which worked well for participants. This feeling of productivity and of work completion is in stark contrast to one of the most often-cited occupational stressors, i.e. work overload (see

Chapter II Section 1d.1).

Example response 1 (*Sunshine 1*): "Was able to clear a number of pieces of work".

Example response 2 (*castlepark*): "Increased productivity, lots of tasks completed".

2a.2) Peer Support

Peer support was found to be the second most cited psychosocial event as to the experience of a pleasant work day in the log phase. Individuals expressed peer support as an area which could reduce everyday psychosocial stress in a number of areas. For example the chance to have clear and productive communications with peers as well as others providing emotional support to colleagues in times of need.

Example response 1 (*cartimandua*): “Had a really productive discussions[sic] with colleagues which offered me a lot of peer support”.

Example response 2 (*Knackered!*): “Every work colleague I’ve come into contact with today has been really sweet and understanding of the pressure I’m under – they’ve been supportive and helpful”.

2b) *Why these Areas are Working Well*

“Why did it go well for you?”

The results of this second question from the log phase were given in conjunction with the question above. Of the potential 152 days worth of information, 145 were collected (95.39%) with 150 points made in total. The reasoning behind this question was to gain further insight into what was working well in the individuals’ work day, thus informing future possibilities.

2b.1) Productivity

Again the experience of continued productivity within the workplace appeared to add greatly to the experience of a good working day. Individuals are often seemingly well engaged with their work, and thus being able to complete work is adding to their pleasant working experiences. Productivity was primarily expressed through the feeling of completing a number of tasks throughout the work day.

Example response 1 (*Cartimandua*): “Achieved a task that should make me more productive and identified work that I need to have to others.”

Example response 2 (*AT*): “I got lots done and felt a lot of burden lifting.”

2b.2) Peer Support

As well as being helped out by peers, also helping others and working together as a team helped to explain why peer support was one of the areas which was working well. Peer support also serves to remove the necessity for too much input from supervisors and management.

Example response 1 (*biker30*): “Giving up a few minutes of my time really helped out a colleague.”

Example response 2 (*hard copy respondent*): “Minimal supervisor input – team working well together.”

2b.3) Communication

Having the ability to communicate effectively with colleagues, management, employees and customers was a further method by which individuals felt that their day was improved. This lateral and horizontal communication appeared to play a strong part in both peer and management support by allowing the quick flow of information.

Example response 1 (*Knackered!*): “I managed to create and get all the various communication out to other departments.”

Example response 2 (*Sally*): “It was really enjoyable welcoming people to the site and having a laugh and joke with them.”

2b.4) Able to Concentrate

Being able to concentrate while working without disturbances was a simple method of reducing everyday hassles that individuals faced. This often meant being productive and managing to get more work completed.

Example response 1 (*Cartimandua*): “I managed my time and was not disturbed so made good progress.”

Example response 2 (*rudedog*): “NO interruptions WFH (working from home).”

2c) Areas not Working as Well

“What didn’t go so well?”

This third question was designed to assess areas in which improvements could be feasibly implemented within the participating department. Altogether 141 out of 152 days worth of information was collected with these responses (92.76%) consisting 158 separate issues.

2c.1) Workload

Although individuals felt that managing to complete various pieces of work, and the productivity associated with this, were positive experiences workload was one of the areas which individuals felt was not working well. The quantitative workload individuals faced was therefore a major source of often-cited stressor quoted by a variety of individuals throughout the log phase.

Example response 1 (*castlepark*): “Too many areas of work that require the same level of attention and priority, making it difficult to structure the day.”

Example response 2 (*Huffer*): “Finding that I was having to take on additional work load. Opening an internal emails[sic] after having made appointments so will miss out on a social team lunch.”

2c.2) IT

Problems with IT systems was the second most often-cited area of problem for Service 6 employees. These issues seemed to revolve around two particular issues: the speed of IT systems and internet, as well as availability of IT systems. There were therefore reported problems with gaining access to the internet due to a lack of Wi-Fi access in certain satellite sites, and along similar lines accessing IT systems on very slow systems was a problem.

Finally individuals in some departments within Service 6 reported having no access to workplace computers which made accessing online organisational services (e.g. the organisation's intranet or webmail) difficult.

Example response 1 (*Cartimandua*): "I had to sit in a whole different TOWN for the network to be able to manage the input of images."

Example response 2 (*Bookworm 82*): "Responding to a research enquiry using the electronic catalogues. So slow I had to abandon the work and use paper records as far as possible – time consuming and frustrating."

2c.3) Email

Analysis of the log responses indicate that the major problem that employees have with respect to email is the sheer number of emails that they receive in a work day. These issues seemed to revolve around two main points: the amount of emails individuals had to read/respond to in addition to peers' reliance on email as the primary source of communication.

Example response 1 (*Knackered!*): "email is now building up in my in-box and I cannot see the wood for the trees – I've been focussing 95% of my energy on the most pressing priority and it now feels like some of the plates are about to stop spinning and come crashing down."

Example response 2 (*Pasang*): "removing large amounts of completely irrelevant corporate spam"

2c.4) Communication

More general communication was an issue for many employees whether this be bottom-up, top-down or horizontal channels of communication. Respondents felt that there was little opportunity to talk directly to management but rather had to go through a number of layers of gatekeepers before communicating higher through the hierarchical organisation. Similarly, participants felt that rather than receiving information 'straight from the horse's mouth' (i.e. from Head of Service 6, or the department managers in service 6) information is passed through a number of layers and thus loses potency. Finally, lateral communication across employee teams was a clear daily hassle for some respondents.

Example response 1 (Lord): "People not answering phone calls or emails, questions not being answered."

Example response 2 (Cartimandua): "Very poor communication from management team surrounding a significant incident at work last week. A good example of poor communication – colleagues were left feeling locked out and disenfranchised by management team response."

2d) How these Areas can be improved

"How could this be improved to make your day more hassle and stress-free?"

For this final question, 141 out of 152 days worth of information were gathered again (note: not all pieces of information were in response to the comments from the previous question) with 152 total ideas as to how particular areas of the workplace can be improved. The question was included in order to discover how areas

requiring improvement can be developed and brought forward to the interview phase, where more detail could be deemed from the information.

2d.1) IT (Information Technology)

An obvious way in which issues with Information Technology speed and efficiency can be developed upon and improved is by providing new equipment, or re-arranging existing equipment, to make systems more appropriate for the job being done. However, within the scope of the presented study this would not be possible. Despite this, other options such as flexible working/printing were put forward by respondents which are more attainable within the remit of the study.

Example response 1 (Pasang): “providing equipment and systems which actually work”

Example response 2: (PAO Employee) “For other occasions, it would be useful to be able to print from home”

2d.2) Workload

The demands placed upon individual employees in the workplace are an often cited source of stress for individuals in organisations (for example see **Chapter II, Section 1b.1**), and the responses gained from the daily logs suggest that for employees within Service 6 this is no different. However, a more structured workload with more communication among those in the upper reaches of the organisation so as not to provide conflicting demands upon individuals may help to improve upon these issues.

Example response 1 (*castlepark*): “clearer structure to workload – reduced workload, assistance with workload”

Example response 2 (*Hard Copy Respondent 1*): “Too many demands from too many directions all at once often leads to mistakes at the till.”

2d.3) Communication

As previously demonstrated, one issue with communication was a lack of emphasis on face-to-face verbal communication, and/or inappropriate bottom-up and top-down channels of communication. Therefore a management-led organisational drive to ensure the use of verbal communication as the first method of communication was a primary, feasible suggestion put forward.

Example response 1 (*Merlin11*): “I would love an organisational push on picking up the phone from time to time and, radically, speaking to colleagues? Or even...in person!”

Example response 2 (*Flora87*): “Better communication in all levels of the service and attention to staff members issues”

2d.4) Email

The most often-cited remedy to any of the organisational issues was put forward with respect to over-use of email. Participants suggested an organisational drive of lowered email use throughout the work day, utilising email

to document verbal discussions rather than as a replacement for them, and removing email alerts with accompanying systematic checks for new emails (as well as mail prioritisation) were all suggested.

Example response 1 (*Knackered!*): “We really need to have a serious think as an organisation about our e-mail usage policy – this beast is way out of control!!!!”

Example response 2 (*merlin11*): “as a general point across the 10 day period that the volume of emails is now very high every day. I do keep on top of them (by working additional hours at home and via pda) but I would love an organisational push on picking up the phone from time to time”.

Table 23: List of common and important themes indicated from log analysis.

Master Subject	Subordinate Themes	Number of Daily Mentions
<i>What's working well?</i>	Work completion	25
	Peer support	16
	Flexible working	4
	Privacy	4
<i>Why is this working well?</i>	Communication	20
	Productivity	17
	Peer Support	15
	Able to concentrate	10
<i>What isn't working as well?</i>	Workload	23
	IT	21
	Email	10
	Communication	10
<i>How could it be improved?</i>	IT	17
	Workload	9
	Communication	7
	Email	6
	Training	5

Top-down communication	4
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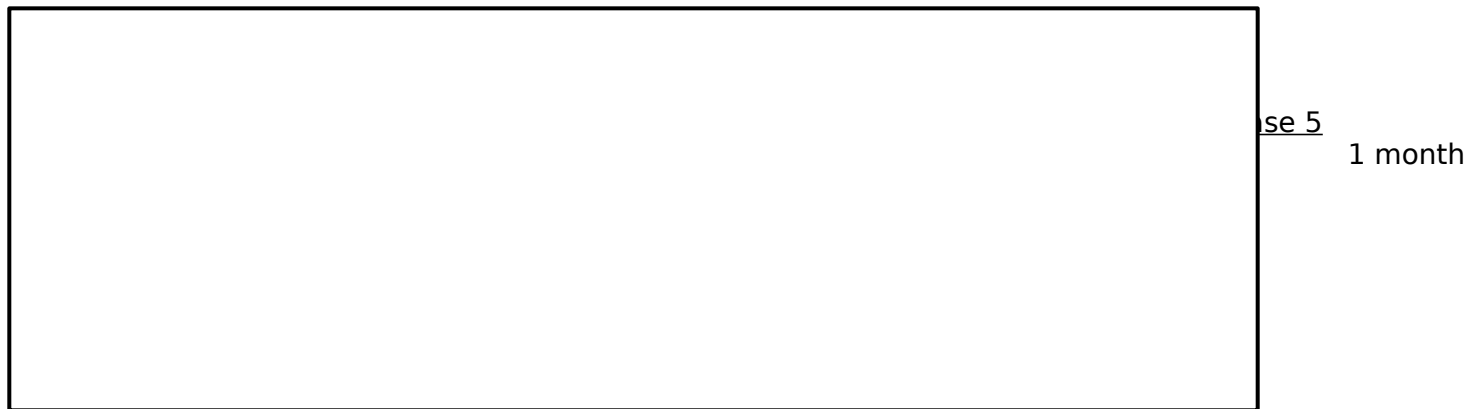
Table 23 above indicates the categories and themes discovered from the log data analysis, as well as the number of times these themes had been mentioned through the logs. While a wide range of themes and outcomes were discovered from content analysis of the log data, those most often cited are presented above. These results will be used to design the semi-structured interview schedule, and in turn the focus group schedule. As such the logs formed part of the first two phases of the Appreciative Inquiry cycle, Discovery and Dream.

Chapter VIII Part 2:

Interview Results

Chapter VIII Part 2: Interview Results

Following on from **Chapter VII Part 1: Log Results**, the present chapter is to present the demographic and resultant findings from Phase 3 of the study – a series of one-to-one semi-structured interviews. The interview schedule (see *Appendix 7*) was designed around the findings from the previous research stage, and therefore was designed to further investigate the recorded phenomena. The interview stage also gave individuals more information from the results of Phase 1 (service-wide survey) as well as the chance to provide information on issues they feel had not been adequately covered already in the interview.



Thirteen individuals took part in the interview phase, with the average length of interview being 32.5 minutes. The interviews ranged in length from 8 minutes (one interview had to be cut short due to work commitments) to 53.5 minutes. Just two of the interviews that were conducted were done so over the telephone, with the others conducted over face-to-face at the employees' place of work in an isolated room to ensure

confidentiality and anonymity. All interviews were conducted by the lead researcher (Jermaine Ravalier), with each digitally recorded in two ways to ensure that there is more than one source should either of the recordings fail: via the use of a mobile telephone and a laptop computer. After each interview both sets of recordings were transferred onto separate password-encrypted folders on two different personal computers, with access to the files restricted to the lead researcher only.

An interview schedule was designed once the log and Survey 1 stages had been completed and fully analysed. The results of these two stages therefore informed the interview schedule (*Appendix 7*). The role of the beginning of the interview schedule was to put the participant at ease while also informing of the nature and purpose of the study, and gaining consent. Therefore the interviewer's role in the participating organisation and at Anglia Ruskin University were explained, and consent was gained by having interviewees read the participant information sheet (see *Appendix 8*) and read and sign two copies of interview consent form (see *Appendix 9*) with one copy retained by the participant and the second retained by Jermaine Ravalier in a locked drawer at Anglia Ruskin University. Participants were then allowed to ask any questions that they may have had, the anonymity of the process was elaborated upon and it was stressed that should the participant want to stop the interview at any time or withdraw their data after the interview process they could do so without penalty.

Section 1 of the interview schedule referred to what had been working well in their everyday working lives, and why. Participants were allowed the opportunity to freely discuss the everyday things that improved upon their working life. The interviewer asked the participants to elaborate upon the answers given here where necessary, as well as asking for suggestions as to how areas could be improved. Next, the results of the first two log phase questions were described to the participant. Individuals were asked whether they agreed with these results as well

as whether they could elaborate upon the results, and finally if the suggestions could be transferred to areas of their own working which are not working as well. This first section of questioning relates to the first two steps of the Appreciative Inquiry cycle:

1. **Discovery:** questioning allowed the appreciation of what is working well in the organisation, as well as what could be improved upon.
2. **Dream:** allowed the individual respondent to design changes to the organisation which could improve upon organisational functioning, thus 'dreaming' of the future organisation.

The second section of the interview schedule began by describing the positive results of the survey which was conducted previously, and asking participants to comment further on these areas. The reason behind this decision was to give participants an idea as to the results of the survey as well as providing some validation of these results. The final section of questioning related to areas which need improvement within the workplace, but specifically the development of feasible workplace interventions which could improve upon employees' working lives. Individuals were also allowed the opportunity to further elaborate upon these comments, as well as give their opinion on any other point which they would like to raise. This final level of questioning relates to the second and third steps of the Appreciative Inquiry cycle.

2. **Dream:** participants allowed to address the issues which they feel require change, as well as how these areas can be changed.
3. **Design:** within this third step feasible positive interventions for change are put forward. These feasible changes allow the derivation of a workable action plan to be put into implementation within the next step, 'Destiny'.

As previously described, 13 individuals from throughout the department took part in this aspect of the study. From the analysis of the interview data 35 separate areas requiring change were discovered and 15 feasible interventions were put forward. What will be evidenced next are the most prominent areas requiring change, as well as the most attainable interventions which were also brought forward.

4) Results

The results of the analysis of the thirteen interviews conducted are presented next. An example of the question asked per interview section is given, together with the most indicative results from the analysis. Finally, explanations and quotations illustrating each of the main points gained are given in order to make clear the context and meaning of the results.

4a) Areas Working Well

“Over the last couple of working weeks, have there been any areas of your work, the organisation, communication in the organisation etc that have made your work particularly stand out for the better?”

As previously demonstrated, this question was designed to assess the first two steps in the Appreciative Inquiry cycle. It is designed to find out the areas of the workplace which are working well and how they can be transferred to other areas that are not working as well.

4a.1) Successful Working

One of the aspects of employees' working lives that impacted greatly upon their experiences of positivity and positive working within the organisation was the occurrence of working successfully. When employees felt they had made gains within their role there was a strong general sense of achievement.

Example response 1 (Participant 3): "There was a big piece of work that I brought to budget group last week".

Example response 2 (Participant 6): "the recent few weeks we've been working towards, erm, a new display which goes up next week and I think like I've been able to get on with it and I've felt quite positive..."

4a.2) Passionate Staff

Within each of the individuals there was a great sense of passion for the organisation to which they belong. They wanted the organisation to be successful and inspiring, and the level of passion and dedication meant that individuals were unafraid of working longer hours than they were contracted to do, or going 'beyond the call of duty' within their role.

Example response 1 (Participant 12): "most people who work in [name of satellite site] are passionate about what they do".

Example response 2 (Participant 6): "I know we can do some really exciting, really accessible things that people are gonna go 'wow look what they're doing in [name of place]..."

4a.3) Creative Staff

Throughout the interview process it became clear that employees were highly motivated to improve the organisation, and that many had clear and wide-ranging ideas and strategies as to how these improvements could be made.

Example response 1 (Participant 10): “At the beginning of the year I put forward two pages of ideas and events that either I could do or other people could do...”.

Example response 2 (Participant 9): “what you have got to understand is we have got the most amazing talented people and they’re degree-level educated, erm they’re creative you know they’re writers they’re artists, everything that you need to do in [name of service] could be done through the pool of staff that we’ve got you know?”

4a.4) Peer Support

For the majority (10 out of 13) of the participants of this phase, the way in which individuals could rely and ‘lean’ upon their colleagues should they require help or support had a huge impact on their experience throughout the work day. Individuals felt more comfortable going to colleagues and peers for help with working situations than they did management, and many felt that this support network was greater than that provided by the organisation.

Example response 1 (Participant 5): “Yeah definitely there are some colleagues that you really rely on to not just in a work, well it is in a work way but not just to give you advice on work but support.”

Example response 2 (Participant 2): “If I had to focus on the positive at any time then it would always be based on my colleagues.”

4b) Areas Requiring Improvement

“Can you think of any areas which can be improved which may lighten the stress load you face?”

While the focus of any Appreciative Inquiry project is the positive, and in particular what is working well, the above question is integral to any change initiative. The question allows identification of areas of 'exceptional working', as well as how these areas can be translated into others which are not working as well. Therefore by focussing on areas requiring improvement whilst using a positively-framed question the 'positivity principle' is maintained.

4b.1) IT Problems

For all employees who took part in the interview phase, IT played a huge part as everyday stressors whether or not the employee was computer-based. These issues ranged from having very slow computers through to a lack of accessibility to organisational intranet and lack of computer capacity and computer programmes seemingly working improperly.

Example response 1 (Participant 10): “I don’t look at the [name of company intranet] and I don’t have particularly good computer skills either unfortunately erm so this [name of company intranet] is like huge and I have no idea where to start.”

Example response 2 (Participant 4): “Yeah I mean IT can be particularly stressful when you’re trying to produce anything greater than a Word document with just text in it erm can slow you down”.

4b.2) Bottom-Up Communication (Not Listened to)

Many of the individuals which were spoken to during this phase of data collection felt that although they were creative with ideas that they believe could enhance the organisation, these ideas would never be listened to and therefore actioned upon. Also, during service-wide change strategies employees felt as though they were asked their opinion on changes purely as a ‘tick box’ exercise, but these opinions were never implemented by management. Therefore communication and subsequent change was always perceived as a top-down process. Furthermore participants also felt that, due to cuts and other organisational changes, they would sometimes not want to speak out about certain subjects due to fear of reprisal.

Example response 1 (Participant 1): “...people will come up with different bits and pieces but then it’ll be ‘no’. Some of them might actually be money-saving like it’ll be no they’ll do what they’ve already got in mind ‘cause nothing is taken into account”

Example response 2 (Participant 9): “they [management] want to get rid of the equivalent of one full-time member of staff, we’ve been given all these options you know rota options and things like that but it doesn’t feel as though we’ve been consulted.”

4b.3) Email Communication

For those employees whose role is more computer-based than others, the improper-use and over-reliance on email as the preferred method of communication was a major source of everyday stress. Many individuals felt that email had become an alternative for verbal communication, despite working in an open-plan office and being just yards from colleagues. Also, there seemed to be an expectation for immediate responses to emails on the part of the sender.

Example response 1 (*Participant 1*): “Stop sending me emails every 5 minutes when you’re in the opposite room going ‘oh have you done this, have done that, what’s going on with this?’”

Example response 2 (*Participant 2*): “In terms of email I think in my point of view the biggest problem with an email is if someone emails you they expect an immediate response.”

4b.4) Satellite Sites ‘Distant’ from Main Organisation

Within the organisation there are a number of smaller sites which work away from the main organisational 'hub', some of which in a different town to this 'hub'. These satellite sites are an integral part of the organisation, but employees did not feel part of the organisation. Due to the geographical distance employees cannot attend many corporate functions, and individuals do not feel as though they receive adequate support from management in order to feel as part of the overall organisation.

Example response 1 (Participant 12): “The [name of service] either in [name of place] feel a little bit distant from the rest of the organisation because, well I suppose they’re separate sites and especially [name of site] are so far away.”

Example response 2 (Participant 8): “...you’re working in one town and you never go into another town, the other part of the organisation will always remain a bit of a mystery”.

4b.5) Team Meetings

It was felt that one of the most important ways in which information is communicated within any organisation is through team meetings – individuals can update management of anything necessary and vice versa. Indeed it was assumed by employees that this should be the predominant purpose in the use of team meetings. However, some of those that took part in the interview phase (6 out of 13) brought up team meetings as being inappropriately utilised for their work groups.

Example response 1 (Participant 9): “We have our regular Tuesday meeting which is the time that stuff has, you know that needs to be said is said, erm and its become an exercise in bashing people over the head.”

Example response 2 (Participant 1): “Often they’re just a time to eat cake and there’ll be discussions about cake, what people are wearing and where they’re going on holiday and it’s not particularly effective for information sharing.”

4b.6) Help Available for Stress

Within any organisation, should employees become overly stressed there are various policies, procedures and lines of communication that they can go down to find help. However, the vast majority (11 out of 13) of individuals in the interview phase had no idea as to what help was available to them should they become overly stressed, with three respondents explaining times when they were reduced to tears at work due to the mounting pressure they felt, but did not know the help the organisation offered to them.

Example response 1 (Participant 4): “But yeah it literally was that, I didn’t know who to talk to who to turn to and I couldn’t face complaining to any more colleagues because they knew that I was upset.”

Example response 2 (Participant 5): “I did get really stressed out recently erm, I didn’t know particularly what to do”.

4c) Feasible Change Interventions

“How exactly do you think these areas could be improved?”

It is an important principle of any change initiative that the strived-for evolutions are attainable and feasible, within the limits of the project. With the presented focus upon ‘everyday hassles’ any interventions and organisational changes must be applied within this context.

4c.1) Training Champions

As above, one of the issues individuals faced in the organisation was the lack of IT infrastructure. Additionally, peer and colleague support was also described as one of the strongest positive influences in the organisation. Combining these two findings, the idea of 'Training Champions' were put forward. The proposed champions would have high levels of computer literacy and be trained to a high level in various aspects of IT. They would then be given the task to help others with IT needs for a certain amount of time per week, as stated within their 'annual working objectives'.

Example response 1 (Participant 2): "In the team meeting it turns out no one else has got to do it so I've got to do a sort of mini training session to show everyone how to do it."

Example response 2 (Participant 3): "When we did introduce like the VOIP telephony system the council did appoint what they call service champions and I think the idea was good but the execution was poor because you know what should have happened us those individuals should be trained up to a level of understanding and those individuals then would've had the time and skills to be able to spend time with other people around the organisation and demonstrate to them how the application works."

4c.2) Bottom-Up Communication

Interview analysis suggested that some employees felt like they were not listened to by management, even when staff were asked for their input. Therefore, allowing individuals to utilise their creativity and passion for the organisation would increase this perception of bottom-up communication. Among the potential interventions

suggested to improve upon bottom-up communication were an anonymous suggestion box, allowing a constructive upward-dialogue. Secondly many realised the importance of team meetings in bottom-up communication, but felt team meetings were often unsuitable. Therefore, in order to improve upon both vertical and horizontal communication across the organisation, having clear agendas and actions from team meetings that are available for all in the service area to study were suggested.

Example response 1 (Participant 6): “I thought of that too [an anonymous suggestion box] but then its like would they, would it actually be effective?”

Example response 2 (Participant 1): “I think like having an agenda and minutes and stuff would make it [team meetings] a lot better because also if you miss a meeting you are expected to catch up.”

4c.3) Email Communication

Email communication appeared to be one of the biggest stressors that individuals faced on a daily basis within the organisation. Employees therefore felt that the frequency and immediacy of email communication needed addressing. To counter this, many felt that focussing on verbal communication as a first point of call over and above email should be a priority for employees as it saves time and effort, and reduces one of the everyday stressors individuals face.

Example response 1 (Participant 12): “To me email is less about documenting actually and more about just getting to somebody, and if it’s something important I will always pick up the phone.”

Example response 2 (Participant 1): “I have a verbal conversation sometimes I will back it up with an email just to confirm what we’ve discussed and sometimes things are better done in email.”

4c.4) Satellite Site Feeling Separate/Distant

The overriding feeling from each of the participants who worked within one of the organisational ‘satellite sites’ was one of separation from the rest of the organisation. Therefore some participants felt that more regular contact with those in the ‘main organisation’, with both peers and management, would decrease this feeling of isolation.

Example response 1 (Participant 6): “You know we could meet our colleagues in [name of place] over the internet just for a one-to-one, I mean obviously occasionally its good for me and travel for those off meetings but if you wanna have a conversation...”

Table 24: List of common and important themes indicated from Interview analysis.

Master Subject	Subordinate Themes	No. of Participants
<i>Areas working well</i>	Relationships with colleagues	10

	Passionate staff	10
	Creative staff	7
	Successful working	6
	IT Problems	13
	Help available for stress	11
<i>Areas requiring improvement</i>	Employees not feeling listened to	8
	Email communication	7
	Satellite site separate	7
	Team meetings	6
	Bottom-up communication	4
<i>Feasible change interventions</i>	Email communication	4
	Training champions	3
	Satellite site separate	2

Table 24 shows the combined results of the interview data collection stage, with the major and subordinate themes listed in terms of the number of participants who mentioned them. It is important to note however that this quantification is solely for comparison and aesthetic purposes, and does not place more importance of one theme over another. From the analysis however these are the themes which were most important to participants and it is these that are presented in the table and text above. The themes in the tables represent the verbatim statements and explanatory narratives as above, taking into account individual experiences of the phenomena under consideration.

Chapter VIII Part 3:

Focus Group Results

Chapter VIII Part 3: Focus Group Results

This focus of the presented chapter is upon the results of the two focus groups that took part with employees from within the participating Service of the organisation. The focus group schedule (see *Appendix 10*) was informed by the results of the previous three stages of the project. By combining these results (see **Chapter VIII Part 4**), and building upon these results in this final stage, a thorough understanding of the everyday stressors individuals face within their organisation is understood. The main premise of this stage was to build upon the feasible positive interventions discovered in **Section 4c** of **Chapter VIII Part 2**, as well as allowing participants to put forward further possible change interventions.



se 5

1 month

ss

Altogether 13 individuals took part in the focus groups, six in the first and seven in the second. In both groups individuals were from a variety of sites and job roles, with each focus group lasting the planned amount of time (one hour and thirty minutes). Other than the participants two individuals were present in the room: Jermaine

Ravalier as lead researcher and Dr Andrew McVicar as a scribe. As such two methods of recording the data to come out of the focus group were utilised. Firstly Dr Andrew McVicar took handwritten notes throughout relating to the progress and outcomes from each focus group. Secondly, Jermaine Ravalier recorded outcomes and interventions at the front of the room on a flip chart. Working in this manner allows individual participants to check what is recorded on the flip chart, and comment whether they believe the recordings to be correct or whether they need adjustment. Furthermore, participants were offered the chance to read through Dr McVicar's notes at the end of the focus group. Following the focus group Dr McVicar gave his computer-typed notes to Jermaine Ravalier for analysis and safe keeping, while Jermaine Ravalier also typed the flip chart notes onto a Word processing programme. The hand-written copies were destroyed using secure recycling, and the computer copies of the work were stored on two separate laptop computers under password-protected, hidden folders.

To ensure ethical considerations were taken into account, dedicated ground rules were set at the beginning of each focus group (see *Appendix 11*) and also set in an easily visible place for all to see in each focus group. The ground rules included keeping everything confidential, so that anything said within each group would remain within the group discussion, and that nobody will be named as part of the discussions, or within the results or organisational report which emanated from the focus groups. In order to ensure anonymity individuals were requested to introduce themselves separately, using first names only, while the first name given did not necessarily have to be their own.

Focus groups completed Stages 3 and 4 of the Appreciative Inquiry cycle. Stage 3 was Design in which feasible changes and action plans are considered, thus building upon what was found in the previous stages. Stage 4 is Destiny, in which action plans are finalised and furthermore plans implementation scheduled. Therefore

this focus group chapter formed the design of action plans for change, which were then presented to management within Service 6 for implementation into the department. Finally, note that superscript figures above certain statements relate to the proposed interventions in **Table 25**.

6) Focus Group Protocol & Results

6a) IT

Every individual who took part in the interview phase found IT systems and/or infrastructure¹ to be a daily problem, and it was also mentioned 21 times in the log phase, the second-most mentioned source of everyday stress. However, while individual felt that IT systems were a daily hassle they also appeared to know that some training was available to help improve upon this issue, but they did not know how to access it¹. Similarly it was clear that some employees are more computer-literate than others, and those with higher levels of computer-literacy would be happy to utilise these skills to help others throughout the organisation ².

Indicative Intervention Suggestion¹: “Target training for different needs. E.g. some people are very IT literate whereas others aren’t. therefore target increased training for those who need it most”.

Indicative Intervention Suggestion²: “IT champions – train some people up to a certain level and allow them to disseminate this training down to other people”.

6b) Email

Throughout the log phase over-use, over-reliance and expected immediacy of response to email were central themes, and ones which was carried on through 9 of the 13 individual interviews that took part in the interviews. Participants described receiving numerous irrelevant emails throughout the day⁵ which take time to read and discard or reply to³. These emails included messages for groups to which the participant did not belong⁴ but still received. Similarly, participants would receive emails from individuals sitting in the same office as them, and many of these same senders would require almost-immediate responses⁵.

Indicative Intervention Suggestion⁵: “An organisational drive to focus on having conversations, instead of using emails all of the time. Therefore use email as a last line of communication. Perhaps using email only as a method of backing up what was said in conversations – would save a lot of time”.

Indicative Intervention Suggestion³: “Accept periods when Outlook is turned off at the workstation but with periodic checks for urgent messages”.

Indicative Intervention Suggestion³: “Maybe enable email buddying for efficiency? Would help to support colleagues”.

Indicative Intervention Suggestion⁴: “Set up targeted groups for [name of satellite site], so that they can send emails to particular groups and not everyone”.

6c) Bottom-Up Communication

With regards to bottom-up communication participants identified a few areas in which improvements could be made, as well as methods in which these improvements can be implemented. Participants felt that, due to the precarious economic state of the organisation and the threat to job security related to this, they would not want to speak out or express opinions. Therefore having the option to put forward views in a constructive and anonymous way⁶ would alleviate some of these feelings. Also participants believed that team meetings were an ideal method of both bottom-up and top-down communication, but often team meetings were often not fit for purpose⁷.

Indicative Intervention Suggestion⁶: “Give people the ability to express views in a constructive way. Keep it anonymous, but don’t do it online. Just a suggestion box may be sufficient”.

Indicative Intervention Suggestion⁷: “See an outcome from team meetings”; “Have a structure for team meetings”; “Minutes could be circulated across teams so you know what is happening in other areas”.

6d) Help Available for Stress

As critically discussed throughout **Section 1** of **Chapter II** chronic stress, and everyday stressors, can potentially have strong adverse effects on individual health and wellbeing as well as implications for organisational performance. Additionally, it is written within UK statute that the mental wellbeing of individuals needs to be adequately catered for at work (for example see **Chapter II, Section 1b**). Therefore it is important that should stress lead to strain outcomes within employees there are clear avenues to gaining help. However, a major area in

which improvements could be made was the knowledge of available help for employees to deal with workplace stressors⁸.

Indicative Intervention Suggestion⁸: “An organisational initiative to make it clear what help is available to people”.

6e) Satellite Site ‘Feels Separate’ from Main Organisation

The participating Service of the organisation has a number of ‘sites’ within which it works, with these sites spread throughout two different towns. The main operating site is where the majority of employees work, with a smaller number of employees working in a number of ‘satellite sites’. Due to geographical distance⁹ and corporate strategy¹⁰ the employees in these removed sites often feel isolated from the main organisation.

Indicative Intervention Suggestion⁹: “We [based in a satellite site approx. 20 miles from main organisation] need to be offered some obtainable invitations to corporate events.”

Indicative Intervention Suggestion¹⁰: “Need a manager responsible for [name of satellite site] OR genuine working between the two sites. Proportional attendance an idea?”

7) Indicative Results

Table 25 indicates the proposed action plans for change as per the results of focus group data analysis. As previously demonstrated the focus group agenda (see *Appendix 10*) was informed by the combined results of the log and interview data. The focus group began by thanking the group for attending and explaining the roles of the

two researchers present in the focus group both within their roles at Anglia Ruskin University and the PAO. Following this participants were asked to introduce themselves with first names only, an explanation of the data collection procedure and findings to date given, and then ground rules set while also allowing participants to include any further rules should they feel it appropriate. Finally the focus group proper began by discussing methods to improve IT systems, followed by potential email and communication improvements. Next were methods to improve the feeling of isolation for satellite sites and finally not knowing what help was available should individuals become overly stressed while at work.

Table 25: proposed change action plans for areas identified.

Action Plans for Change	
IT	<ol style="list-style-type: none"> 1. Target new training better so that those who need it more receive it as necessary. 2. Have IT champions who can advise others with IT help as part of their job role.
Email	<ol style="list-style-type: none"> 1. Have a top-down, service-wide 'drive' to use verbal communication (telephone/face-to-face) over email at all opportunities. 2. Turn off email alerts to remove constant distractions, but with systematic (hourly/twice-hourly) checks for important emails which require urgent attention. 3. Enable an email 'buddying' system for when employees are off from work/unavailable to answer emails. The buddies will reply to urgent emails, and prioritise emails in terms of importance. 4. Set up targeted email groups so that when group emails are sent, they go to specified groups of employees as opposed to all employees.
Bottom-Up Communication	<ol style="list-style-type: none"> 1. Employees often felt unable to, and sometimes intimidated to, put forward their views on anything important happening throughout the organisation. Therefore by allowing individuals to put forward anonymous and constructive ideas and suggestions to management would improve levels of bottom-up communication. 2. As a method of bottom-up communication, team meetings are the ideal forum. However team meetings also need to be constructive and positive. Therefore by having clear agendas and actions from team meetings, as well as making these actions available across the service for all to see, would increase both lateral communication across teams as well as bottom-up and top-down communication.
Help Available for Stress	<ol style="list-style-type: none"> 1. Make it explicitly aware all of the potential organisational help and avenues that are available to deal with stress. This includes hard-copies of policies and procedures, as opposed to the information being based on the company intranet which not all employees have easy and ready access to.

**Feel 'Separate'
from Main
Organisation**

1. Individuals in organisational satellite sites receive a lot of information about corporate functions which they do not feel are attainable due to geographic distance. Therefore having events that are attainable (i.e. subsidised travel expenses; events closer to the site) would reduce this feeling of isolation from the rest of the organisation.

2. Have 'proportional attendance' by management across sites. Many individuals in the satellite sites felt that they did not know their manager, but having regular access to management would help this issue.

As evidenced through **Chapter VIII Parts 1 and 2**, apparent poor IT systems and/or provisions were an area of the workplace which required improvement. In order to deal with these issues two feasible interventions were designed which would have the potential to impact greatly on employee daily hassles. First of all it was widely agreed that individuals throughout the organisation have differing levels of IT literacy. Therefore by targeting new and existing training modules depth toward those who require the extra training, rather than giving a shallow level of training to every employee, would help improve on this area.

A second suggestion would incorporate two of the areas depicted as working well. Results from both the log and interview stages suggested that peer support/relationships with colleagues was one of the areas which improved upon individual experiences throughout their working day. Similarly, the passion and dedication of staff within Service 6 was clear to see throughout the interview phase. In combining these two areas the idea of having a number of 'Training Champions' throughout the Service were suggested. These champions would be individuals of high IT literacy and, as part of their annual working objectives, would be responsible for providing help and advice on anything IT-based to others in the Service who may be struggling.

The use of email was one of the most often-cited organisational issues for employees of service 6 and in order to overcome these issues four feasible implementations were put forward by participants. Results from the previous stages of research suggested that work colleagues often utilised email as a first method of communication, and as such a management-led drive toward the use of verbal communication ahead of email is the first planned intervention. Similarly, it was felt that 'all staff' emails which are received by all employees, rather than the planned recipients from particular departments, were sent too often and thus increasing the number of emails individuals received on a daily basis. Therefore by setting up targeted email groups for each different department in the service would easily alleviate this issue. A third method of reducing the number of emails individuals are forced to act upon throughout the day is by turning off email alerts so that new messages are not automatically flagged up as soon as they come through. By doing this, with systematic checks for new important emails every two hours or so, individuals will be able to concentrate more fully on the task that they are currently performing. The final suggestion put forward refers to times when individuals are away from work for a period of time and how to help deal with the emails that may amass in their absence. The suggestion was to have email 'buddies' that must be identified before leaving work, with those buddies (colleagues) given access to emails in order to prioritise or respond to urgent emails.

Results provided evidence that bottom-up communication was often difficult in the organisation, with the problem exacerbated by employees feeling unable to put forward suggestions or comments to those higher in the organisational hierarchy. Therefore the proposition of having an anonymous method of putting forward any creative thoughts and suggestions was placed as an effective method of improving employee to management communication. A second suggestion reported to increase bottom-up communication was via improved use of

team meetings. Team meetings were identified as the ideal method of employee to management, management to employee and lateral communication across departments but it was felt that often team meetings were not fit for purpose. Therefore by making agendas and actions from team meetings available to other departments throughout the organisation, and as such making team meetings transparent, a two-way communication process would be ensured.

Results of the interview phase suggested that should individuals experience a negative reaction due to chronic workplace stress they would not have a clear idea as to the organisational avenues available to them with respect to overcoming these reactions. In order to deal with this issue it was suggested that the help available to employees to deal with these stress outcomes is made clear. Therefore hard- and online-copies of the particular policies designed to deal with these wellbeing problems are to be made available, as well as any other possible avenues that individuals may turn to for help.

The final area in which the focus groups were concentrated was done so for those employees who worked outside of the main 'hub' of the organisation. Participants based within these satellite sites had a feeling of isolation from the rest of the organisation due to physical geographic distance. Therefore individuals felt that holding corporate functions at sites outside of the main hub, or partially paying for travel expenses for employees to be able to get to these functions, would help with this feeling of isolation. Similarly, a perceived lack of management attendance in these outer sites was also cited as an exacerbating feature. Therefore by having 'proportional attendance' by management across all sites, rather than focussing time and effort on the main building, would improve the feeling of isolation.

Chapter VIII Part 4:

Synthesised Results &

Local Stress Theory

Chapter VIII Part 4: Synthesised Results & Local Stress Theory

The original idea behind conducting a mixed methods study, in which the qualitative and quantitative elements were conducted and analysed separately, was to conduct research in which results would not then be mixed for comparison. Indeed the quantitative phases had been designed to provide a contextual analysis of the organisation whereas the qualitative Appreciative Inquiry aspect would lead to organisational development and change interventions. However, upon completion of data analysis it was realised that some of the findings converged and supported each other. Therefore the analytical findings of the qualitative and quantitative aspects have been compared to discover which resonate closely with each other as well as those that do not.



Phase 5

1 month

literature is increasingly taking into

account the effects that daily hassles can have on stress-related outcomes. The authors stress that because minor stressors tend to happen regularly throughout the working day they can have as much, if not greater, impact than major life events. Despite this, the transactional model of stress argues that both daily hassles and major events

play an important part in the experience of stress. Therefore the present study utilises methodologies which take into account both daily hassles and major life events. Indeed the AI methodologies used had been designed to assess daily hassles, whereas the MSIT takes into account major life events, although it is possible that not all of the same participants took part in both the qualitative and quantitative phases.

8) Log & Interview Result Synthesis

Synthesised results suggest that when used together, daily logs and semi-structured interviews can provide a wide-range of convincing outcomes some of which mirror each other whereas other results diverging. From the log results it was suggested that two predominant areas were of interest and made the biggest positive impact on individuals' working lives. These were:

- Peer Support, i.e. positive relationships with colleagues which would help employees to deal with difficult working situations.
- Work Completion, i.e. a feeling of being productive in the workplace.

As with any other qualitative work a large number of categories were mentioned throughout the log phase, but many of these were wide-ranging and not as uniform as were peer support and work completion. In a similar manner, a number of clear and effective categories of data were developed from the interview data. The interview schedule was informed by the results of the log phase and therefore questions looking at what was working well involved enquiries as to the impact of peer support and work completion. However, the questions asked were open

ended, and further open-ended questioning was also included thus allowing the discovery of further categories. As such a number of distinct overall categories were found from interview data analysis:

- Relationships with colleagues - friendships with colleagues helped to improve individual experience in the workplace.
- Passionate staff - employees were clearly passionate about working for the organisation, and about having the opportunity to improve it.
- Creative staff - as well as being passionate about working for the organisation, employees had a variety of ideas as to how it could be improved to save money and improve psychosocial working conditions.
- Successful working - the experience of completing pieces of work often throughout the day.

Table 26 illustrates the areas of the workplace which were found to be 'working well' through the log and interview phases. It demonstrates those themes which merged from the two data collection phases, headed 'similarities' in the table. Also on the table are the 'differences', i.e. those areas which were working well and yet found solely in either from the log or interview phases. These differences can potentially be accounted for in two ways:

1. Individuals who took part in the interview process did not explicitly agree with the comments and results from the daily logs.
2. The interviews were semi-structured in nature. Therefore, while having a basic interview schedule to work towards the semi-structured nature means that interesting and potentially important developments can be explored during the interview process which cannot be done within the log process.

Table 26: similarities and difference from Log and Interview results for the areas working well.

What's working well?	Similarities		What's working well?	Differences	
	Logs	Interviews		Logs	Interviews
	Peer support	Relationships with colleagues		-----	Passionate staff
	Work completion	Successful working		-----	Creative staff

Table 26 above shows the results of synthesis of the log and interview results data. Indeed both of the main categories derived from the log data were agreed upon by interview participants. 'Peer support' (i.e. encouragement, sponsorship and aid from colleagues) was a strong emergent theme as to what is working well throughout both the logs and interviews. Similarly work completion (logs) and successful working (interviews) were strong emergent themes mirroring each other.

As **Table 26** demonstrates however, there are also a number of divergent themes gained from the first two qualitative research phases, each of these from the interview phase as two themes dominated the categories from the log phase, and four themes emerged from the interview data. These further two themes are 'passionate staff', as well as the feeling of staff having creative and innovative ideas to improve the organisation.

Table 27: similarities and difference from Log and Interview results for the areas requiring improvement.

What needs improvement?	Similarities		What needs improvement?	Differences	
	Logs	Interviews		Logs	Interviews
	IT	IT problems		Workload	-----
	Email	Email communication		-----	Help available for stress

In the same manner as emergent and divergent themes relating to what's working well were established from the first two qualitative phases of the study, similar and divergent categories were established for areas needing improvements. Indeed one of the two most emergent themes to come from the log phase was that of a need to improve IT provisions throughout the organisation. This was mirrored in the interview outcomes, in which IT provision improvement was one of the most powerful determinants as to what needed improvement within the organisation. Similarly, email communications was one of the strongest outcomes in both the log and interview phases with respect to an area which needed improvement.

As well as the number of similarities between the findings of the log and interview phases, there are also a number of different and divergent outcomes. For example, the area which was most often cited from the log phase as working well was the experience of a high workload. Therefore while it was the experience of 'small gains' with respect to completing pieces of work which improved the working day, having a workload which is too great throughout any one working day was a problem for employees. Second divergent findings emanate from the interview analysis findings. From the semi-structured interviewing it was clear that should individuals become overly distressed through the work day they had no idea of the help that would be available to them. Similar responses were not gathered from log data and were therefore not part of the original interview schedules, but it became clear that this was an important issue throughout the interview sessions.

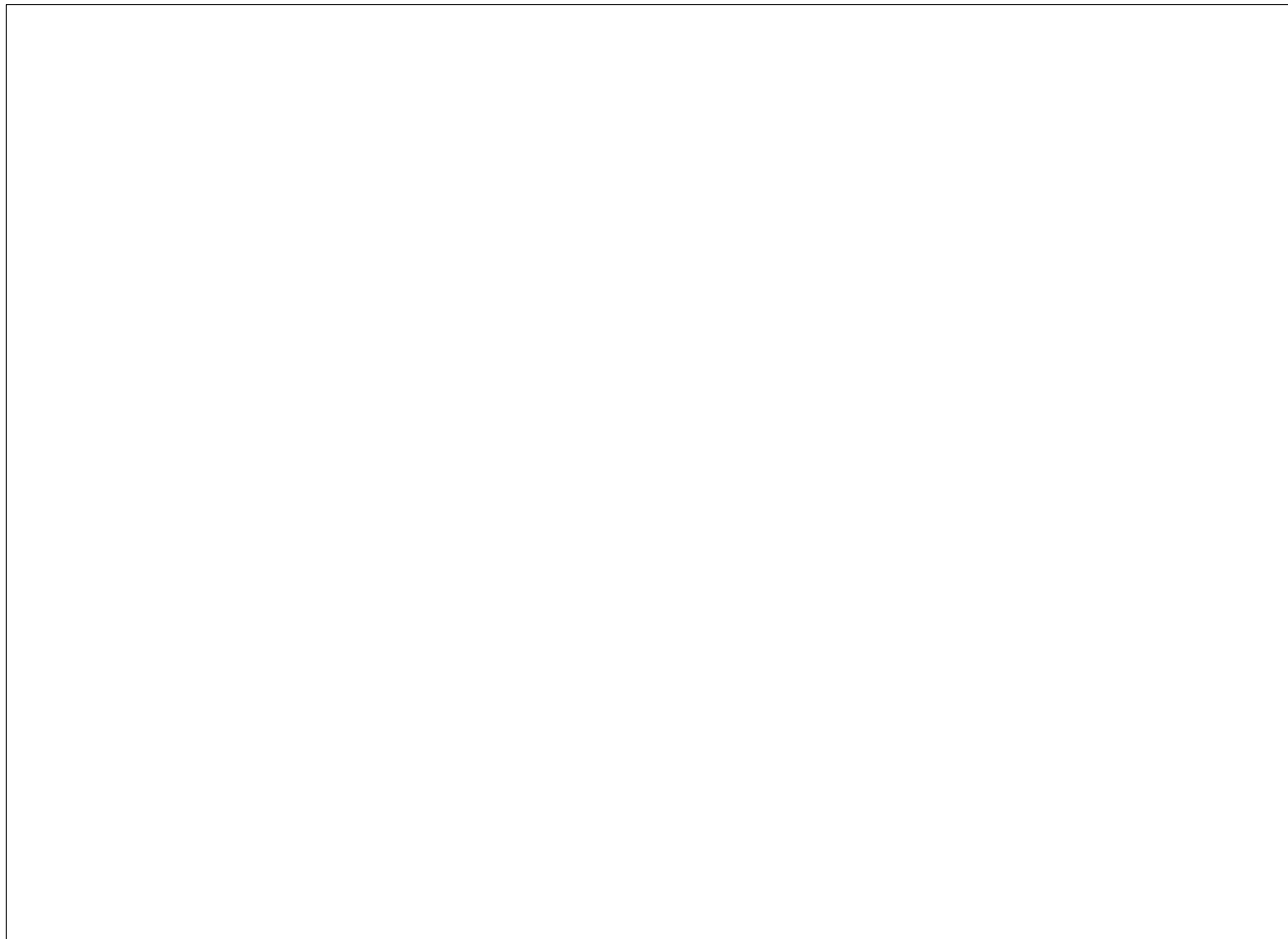
9) Mixed Methods Results

As presented critically in **Chapter VI, Section 1a** the label of mixed methods research is given to any project which collects, analyses and interprets some mixture of qualitative and quantitative methods within a study. Throughout the numerous professions which have utilised mixed methods over the years, a variety of number and typology of mixed methods design have been utilised. Cresswell and Plano-Clark (2006) however argue that many of the classifications share numerous similarities although with emphasis on small differences, and henceforth described four major types of design (and hence reasons for conducting mixed studies) within which studies which utilise mixed methods can be placed.

According to Leech and Onwuegbuzie (2009) mixed methods exist on a continuum from not being mixed through to fully mixed methods. While non-mixed methods (also described as monomethod designs) utilise solely qualitative *or* quantitative, fully mixed designs are the most highly mixed with partially mixed methods existing in between the two. Indeed the largest difference between partially and fully mixed research is with partially mixed work the data is collected either sequentially (i.e. in a logical sequence/order) or concurrently (i.e. both qualitative and quantitative data are collected and analysed at approximately the same time) before being mixed during the data interpretation stage.

In the presented thesis the method of mixing the two data types has been greatly facilitated by the depth of information gained throughout the qualitative AI phases, as well as the outputs given from the MSIT analysis tool. Survey 1 analysis tool outputs (see *Appendix 6*) show the areas which are working well, according to benchmark data determined by the publishers, as well as those requiring improvement. Each of the seven areas are clearly defined and summarised from the analysis tool, and therefore the overall meanings of these results can be safely compared with the qualitative data outcomes. It is therefore likely that there are to be both convergent and

divergent similarities and differences in results. As well as this there will be qualitative outcomes which are non-existent in the MSIT, due to the more restrictive nature of quantitative self-report tools (e.g. the MSIT looks at just 7 areas of the workplace, whereas open-ended qualitative responses have the potential to take a number of directions).



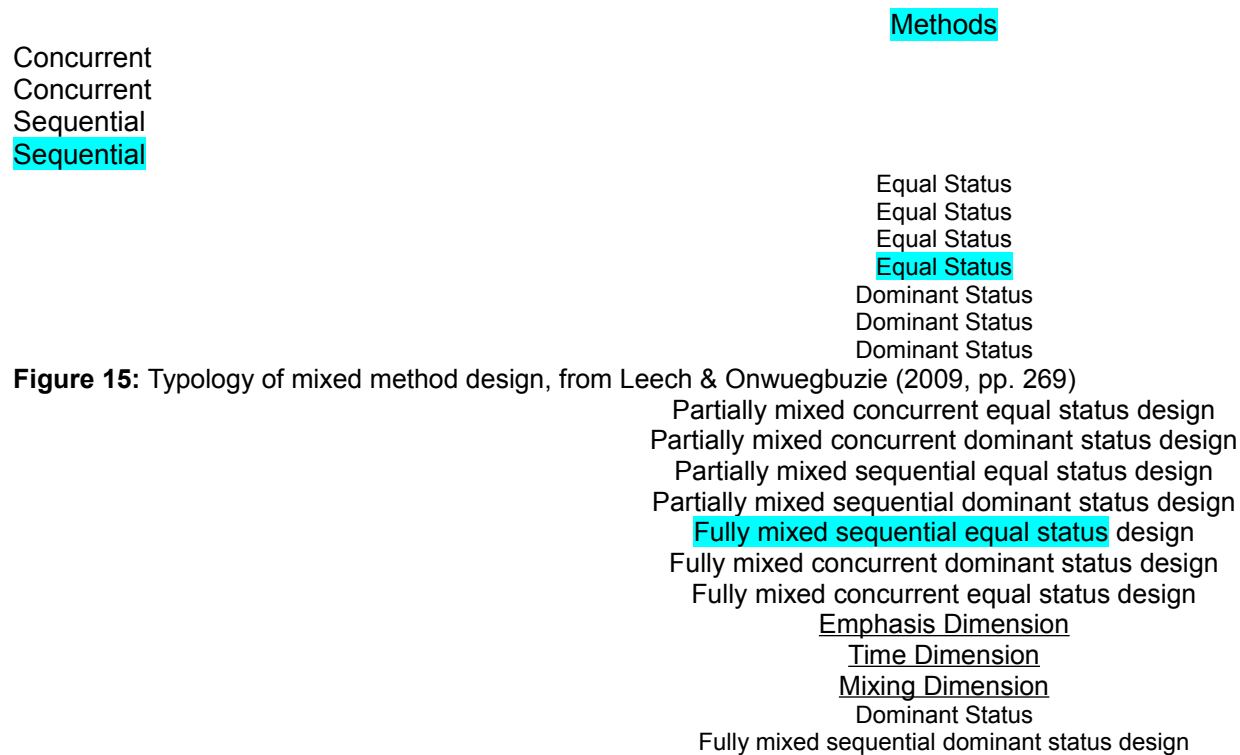


Figure 15: Typology of mixed method design, from Leech & Onwuegbuzie (2009, pp. 269)

*Current study represented by the highlighted components.

Leech and Onwuegbuzie (2009) conducted a content analysis of a number of mixed methods design studies, with results suggesting that each of these designs can be conceptualised and differentiated due to three separate dimensions: mixing (partially or fully mixed), time (concurrent or sequential) and emphasis (equal or dominant status given to either qualitative or quantitative data). In conducting the content analysis the authors published a

flow chart which can be used to represent the vast majority of mixed methods studies (see *Figure 15*), within which the presented study is described as a 'Fully Mixed Sequential Equal Status' design.

The presented research has 'equal status' because it places no greater emphasis on either qualitative or quantitative methods. Although the qualitative Appreciative Inquiry methodologies have been an obvious necessity in the design of interventions conceived to improve upon employee experience, the results of the Management Standards Indicator Tool played an important part in the semi-structured interview agenda and process. Similarly the use of the MSIT for an understanding of the type of organisation, as well as an objective measure of psychosocial hazards, provided an important insight into the method of working and types of feasible change interventions that may work within the organisation.

The study has taken a clearly sequential rather than concurrent time 'dimension'. The five stages of data collection occurred over a period of almost 12 months and happened one at a time. Each phase of data analysis occurred sequentially too, with collected information analysed immediately following completion of each data phase and henceforth informing the preceding phase (other than re-administration of the survey tool, which was conducted for contextual purposes alone). Lastly the work is fully mixed because the results of the quantitative phase were taken forward into the qualitative interview stage which provided great in-depth information and provided the grounding for the design of interventions.

As demonstrated, the presented thesis can be is a fully mixed and equal status study. The main focus of the presented study was to design a number of interventions designed to improve upon employee experience of workplace stress, with the focus group results representing the suggested organisational change interventions. Indeed the focus group agenda and results represent a combination of each of the qualitative phases of the work

because each sequential stage fed the agenda of the next. Therefore the results of the focus group will be the emphasis of the qualitative aspect of the work to be compared against the results of the MSIT later in this chapter.

Lastly, it should be noted that only the Management Standards Indicator Tool, as a measure of the psychosocial workplace hazards, will be included in the combination of qualitative and quantitative methods. This is because the Maslach Burnout Inventory-General Survey focuses on chronic stress-related outcomes (Exhaustion, Cynicism and Professional Efficacy) which the positive underpinnings of an Appreciative Inquiry methodology would struggle to fulfil, and as such no related qualitative data has been collected. However, the psychosocial hazards as measured by the MSIT can be reported positively with qualitative results also focussing on these outcomes at times.

9a) Combined Results: Similarities

The following section of this thesis is to look at the similarities discovered when mixing the qualitative and quantitative results. As is inherent within the research study, a focus was on what worked well within the organisation, as well as what could be improved, is taken. Therefore convergent findings from the qualitative and quantitative elements of the work are to be depicted through a series of flow charts alongside accompanying resultant descriptions.

9a.1) What's Working Well

As already critically discussed in **Chapter VI Section 1b**, the methodology used to uncover qualitative data was Appreciative Inquiry. Convergent themes found to be working well from a mix of the qualitative and quantitative work, with a focus upon what is working well, show that 'Relationships' is the one convergent result among the two.



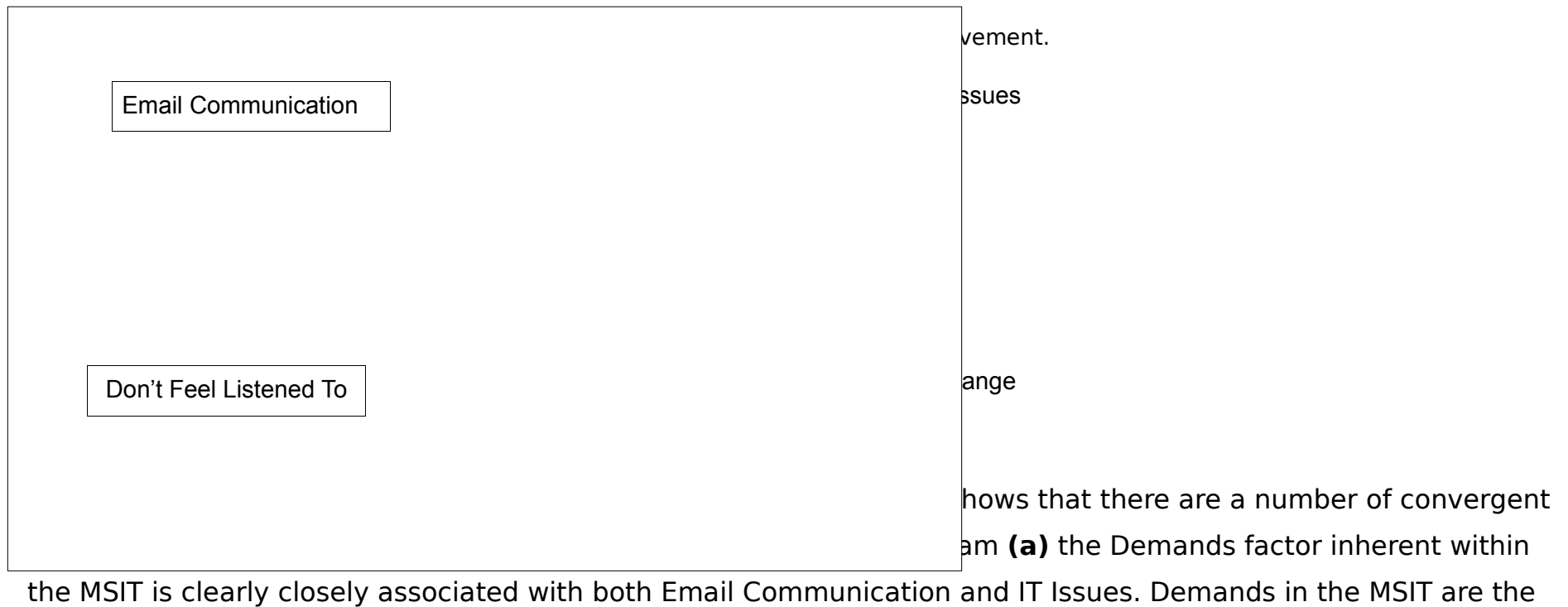
ell.

Mixing results from the Management Standards Indicator Tool and qualitative AI processes therefore indicate that just one of the areas assessed as working well converge appropriately. Within the MSIT, Relationships is described as including positive working to avoid conflict and dealing with bad behaviour. Indeed throughout the qualitative phase participants described having fantastic relationships with colleagues and often mentioned that it was the relationships with, and support offered by, colleagues which made the working day enjoyable.

9a.2) What Needs Improvement

As well as the similarities which have been working well in the organisation, it has also been important to find the other parts of the organisational system which require improvement. Therefore the following section will

demonstrate the convergent ideas to come out of the qualitative and quantitative phases, with an emphasis on the areas which require improvement.



workload, work patterns and/or work environment. While the AI results found that neither work patterns nor work environment required improvement, both email communication and IT issues had the potential to add vastly to employees' workload. For example, participants described the sheer number of emails as well as an over reliance on the use of email communication as adding vastly to individual employee workloads. Similarly, having problems with IT systems (both hardware and software) both added the amount of time taken to perform tasks as well as to the perceived workload.

Managerial Support, or the support an employee feels that he/she received from management and the organisation as a whole, is a second area which required improvement. This quantitative result was corroborated throughout the qualitative process with three particular areas requiring improvement. The first of these, 'Satellite Sites Feel Separate', was described by individuals who work within the workplace which are removed from the main 'hub' of the organisation (see **Chapter V Section 2** for a demonstration of the makeup of the organisation). They felt that they were underserved by management, and the organisation regularly failed to provide obtainable invitations to corporate events due to the geographical distance between the sites. Similarly many individuals felt that they had no idea as to the avenues available to them either through line management, Human Resources or senior management to provide help should an individual experience something that they could not effectively cope with such as stress or bullying. Therefore the support from the organisation on these kinds of issues did not appear to be forthcoming. Thirdly while it has been demonstrated that the participating staff had great enthusiasm and creativity in their work, they often felt that this creativity was underutilised. For example individuals often feeling that, should they put forward constructive criticism to management or suggestions for improvement, they may be criticised for doing so or otherwise the points made would be disregarded.

Similarly, analysis of comments relating to employees not being listened to show that this can also be attributed to the 'Change' factor inherent within the MSIT. The factor regards how change is managed and communicated in an organisation, and with the creative staff within the organisation not having the opportunity to put forward their suggestions as to how aspects of the organisation could be improved, the change is not managed effectively. Similarly respondents felt that previous change initiatives had been completely top-down and forced upon employees without consultation or description of anticipated gains, again demonstrated that change had not been communicated effectively from management to employees.

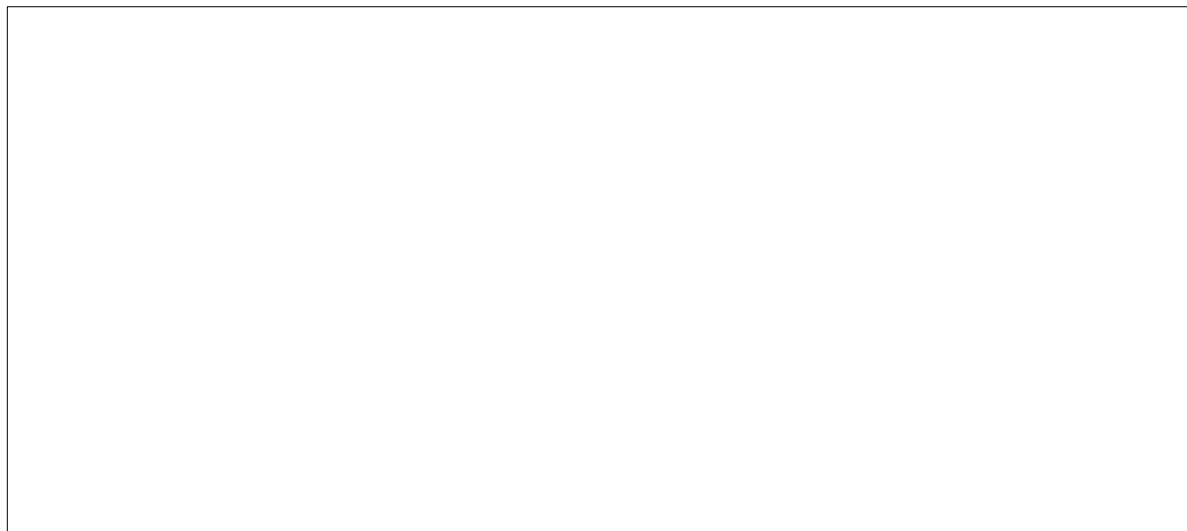
9b) Combined Results: Differences

As well as convergent similarities in the mixed methods findings, there are inevitable differences following the mixing of the two. These differences could be due to the wide and in-depth nature of the qualitative phase when compared to the narrower field of the MSIT, as well as the fact that the quantitative data was collected over a longer period of time while the organisation was undergoing a time of major changes in circumstances (for example see **Chapter VII, Section 5**).

9b.1) What's Working Well

According to results from the MSIT analysis tool, only two areas of the workplace could be described as working well, with the rest requiring improvement. These two areas were found to be convergent with qualitative outcomes above, and therefore the remaining qualitative aspects had no quantitative areas to be matched toward.

As such only qualitative analysis outcomes are represented in *Figure 18*, the divergent results which focus upon what is working well.



qualitative results.

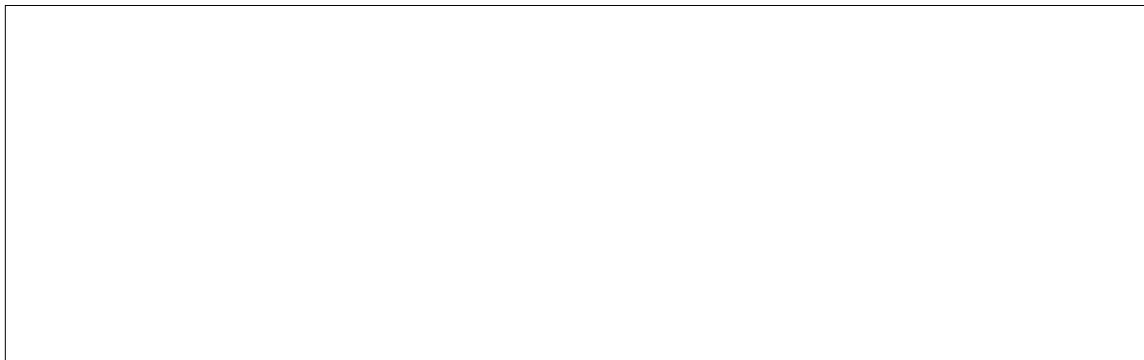
been matched to qualitative outcomes.

The four qualitative divergent areas found to be working well are depicted in *Figure 18*. 'Successful working **(a)** relates to the achievements that individuals feel that employees gain while at work. Respondents felt that the experience of fulfilling work and meeting deadlines on time were major aspects of their positive working experiences. Employee respondents were also very passionate about working within the participating organisation **(b)**. They clearly had an affinity with the organisation and the passion shown by respondents reflected this. Similarly participants felt that they had the expertise and experience to improve the organisation, and many felt that they had the creativity to make a difference to the organisation should they be given the chance **(d)**. Lastly,

there was a clear positive outcome with respect to Peer Support **(c)**. Indeed, the support and guidance provided by fellow colleagues allowed respondents to achieve more at work and to deal with stressful situations.

9b.2) What Needs Improvement

The results already presented show that there have been a number of areas both quantitatively and qualitatively which were 'working well' and do not match. Similarly both quantitative and qualitative outcomes found areas requiring improvement which do not complement each other. *Figures 18 and 19* depict the qualitative and quantitative results which cannot be matched with any others.



alitative outcomes.

One clear area of divergence between the qualitative and quantitative outcomes was the finding within the MSIT that Peer Support was an area of working which required improvement, whereas the qualitative results clearly found this factor to provide a positive experience. Indeed, for many respondents Peer Support was an important

feature of the workplace which helps with their everyday experiences of stress via mechanisms such as reducing demands, and providing support should a particular experience become too stressful.

Results of the MSIT also presented 'Role' and 'Control' as further areas requiring improvement. Role, which refers to the employee understanding of their role in the organisation and a lack of role conflict, was not found in the qualitative phase as an area which required improvement when participants were asked about it. Similarly Control, or the amount of say that individuals have within his/her work, was an area of psychosocial risk in the MSIT but had no direct relationship from qualitative results.

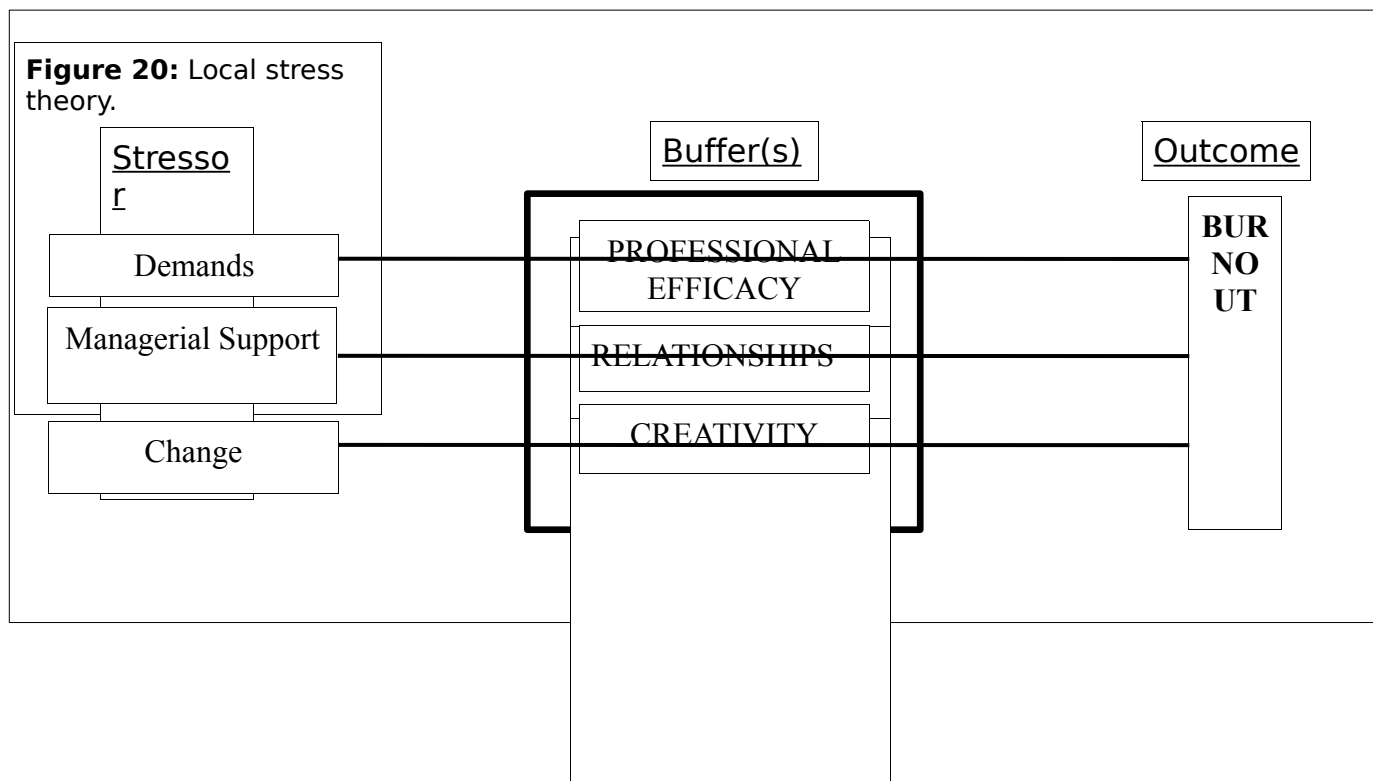
10) Local Stress Theory

Among the included objectives of the presented thesis, the first was the design of a 'Local Stress Theory' based on the results of the mixed methodology analysis which can be applied to the population of Service 6. *Figure 20* therefore depicts the outcome of the local stress theory.

The design of this local stress theory was facilitated by the convergent mixed methods data analysis, as demonstrated throughout **Section 9** of this chapter. Quantitative and qualitative results which complimented each other, presenting confirmatory research outcomes, become part of either the 'stressor' or 'buffer', depending upon whether each area was working well or needing improvement. Additionally, where there was no potential for convergent outcomes (for example where the qualitative results described phenomena not measured in the quantitative surveys), these areas were added to the stress theory also.

Those subjects presented as a 'Stressor' below represent the outcomes which were clearly found to require improvement, whereas the 'Buffer' concepts relate to those working well. Throughout the Appreciative Inquiry

process the discovery of ‘positive exceptions’ as well as asking respondents to describe the ideal service and translating these ideas into feasible change outcomes have been a key component. These positive exceptions, or in other words the ‘things working well’ work as buffers toward stressors for employees, playing an important in relieving, coping with and preventing stressors before they overwhelm resources to become strain outcomes. At the same time the broader areas requiring improvement were assessed, with these areas relating to the stressors which afflict employees.



The design of a local stress theory has been completed in order to give the reader, as well as the participating organisation, an understanding of both the issues and buffers toward the experience of stress within the Service 6. The theory represents the stressors identified by staff, as well as the areas of the workplace or organisational systems which can act as a barrier toward these stressors. The first of the identified stressors was Demands of which communication systems in the form of inadequate IT systems and an over-reliance on email communication systems are examples.

Secondly Managerial Support, or the guidance and help offered to staff by management in the organisation, was found to be a clear problem for employees. In particular a lack of perceived help for problems such as chronic/acute workplace stressors moving from the realm of stress into and strain outcomes. Also participants felt that they did not have a sufficient voice within the organisation, and in particular a lack of the ability to influence change processes which are implemented within the organisation. Thirdly one of the most pressing issues for staff based in the organisational 'satellite sites' was the lack of managerial presence.

It is proposed that, along the lines of the stimulus approach, chronic exposure to any combination of the three predominant stressors as represented in the local stress theory has the potential to lead to stress-related outcomes. However, it is also proposed that an interaction between the individual and other organisational aspects, or buffers, can help negate the effects/impact of chronic stressors. The first of these buffers toward stress are the relationships between employees. Relationships are the interactions between peers in the workplace, as well as peers providing help and support where necessary.

Professional Efficacy was the one area of the MBI-GS found to be working well for the majority of employees within Service 6, and was also found throughout the AI process as a positive area of working (i.e. 'Work Completion'

from the log phase, and 'Successful Working' from the semi-structured interviews). Therefore employee experiences of accomplishing positive outcomes at work, and in particular the regular completion of workplace goals, played a positive part within employees' working day. Indeed participants demonstrated that Professional Efficacy was one of the aspects of the working day which helped to negate some of the negative pressures at work.

Finally staff felt that their creative ideas as to the running of the organisation and in particular methods of improvement for the organisation to help improve efficiency, reduce and relieve stress, and make the represented job roles more enjoyable. This creativity would therefore allow for the development of an improved service, and as such improved job role. Indeed creativity directly buffers the negativity of organisational change, as it presents the feel that employees have the potential to positively impact upon organisational change. This is a clear example of the individual interacting with the working environment in a manner similar to that provided in the Transactional theory of Lazarus and Folkman.

It is proposed that an interaction between the person and pertinent aspects of the organisation, and in particular the organisational stressors described in *Figure 20*, has the potential to lead to stress-related outcomes such as burnout. The way in which, and amount of experience, that psychosocial stressors impact individuals differs which makes this interaction between the individual and the stressors important. Similarly the amount of impact that buffers have on the individual experience of stress is variable across individuals. However, it is lastly proposed that should the transactional experiences of the individual with a stressor be too much for individuals to cope with (even with the impact of the stress buffers) then the stress-related outcome burnout can occur, as was found with 10% of the participating population.

Chapter IX:

Action Plans &

Management Response

Chapter IX: Action Plans & Management Response

The presented chapter will provide a discussion as to how the interventions presented to senior management were taken on board, as well as whether the interventions were implemented in a full and unhampered manner. The chapter therefore begins by detailing the management steps taken to deal with the suggestions provided to them. Secondly it is recognised that AI is a methodology in which the researcher plays a number of roles, and is therefore key to the outcome of the work. This role is examined in the latter part of the chapter, alongside the impact that these varying roles and positions may have had on the research process.

1) Management Response to Intervention Suggestions

Perhaps the most important outcome of the presented research is whether the interventions devised through the combined AI processes would be taken on and implemented by senior management within Service 6. The following section of this chapter therefore will reflect upon the suggestions put forward to senior Service 6 management at their monthly meeting; whether the suggestions were implemented as well as management reaction to the suggestions.

Table 29, an adapted version of the action plans gathered following completion of focus group data analysis, presents the action plans for change which emerged from these discussions. Also added to this table (as opposed to **Table 25** from **Chapter VIII Part 3: Focus Groups**) is whether the suggested intervention is considered a primary, secondary or tertiary change. Lastly the table indicates where on **Table 29** (management responses to suggested interventions) management have clearly responded to and implemented changes.

Table 28: proposed change action plans for areas identified.

Factor	Action Plans for Change	Primary, Secondary or Tertiary?	Plan Implemented? (Table 29 Below)
IT	1. Target new training better so that those who need it more receive it as necessary.	Primary	Yes (5.1)
	2. Have IT champions who can advise others with IT help as part of their weekly working role.	Primary	Yes (5.3)
Email	1. Have a top-down, service-wide 'drive' to use verbal communication (telephone/face-to-face) over email at all opportunities.	Primary	Yes (2.3)
	2. Turn off email alerts to remove constant distractions, but with systematic (hourly/twice-hourly) checks for important emails which require urgent attention.	Primary	Yes (2.1)
	3. Enable an email 'buddying' system for when employees are off from work/unavailable to answer emails. The buddies will reply to urgent emails, and prioritise emails in terms of importance.	Primary	Yes (2.2)
	4. Set up targeted email groups so that when group emails are sent, they go to specified groups of employees as opposed to all employees.	Primary	Yes (2.6)
Bottom-Up Communication	1. Employees often felt unable to, and sometimes intimidated to, put forward their views on anything important happening throughout the organisation. Therefore by allowing individuals to put forward anonymous and constructive ideas and suggestions to management would improve levels of bottom-up communication.	Primary	Yes (4.1, 4.)
	2. As a method of bottom-up communication, team meetings are the ideal forum. However team meetings also need to be constructive and positive. Therefore by having clear agendas and actions from	Primary	Yes (4.2, 4.3)

	team meetings, as well as making these actions available across the service for all to see, would increase both lateral communication across teams as well as bottom-up and top-down communication.		
Help Available for Stress	1. Make it explicitly aware all of the potential organisational help and avenues that are available to deal with stress. This includes hard copies of policies and procedures, as opposed to the information being based on the company intranet which not all employees have easy and ready access to.	Primary & Secondary	Yes (3.1, 3.2)
Feel 'Separate' from Main Organisation	1. Individuals in organisational satellite sites receive a lot of information about corporate functions which they do not feel are attainable due to geographic distance. Therefore having events that are attainable (i.e. subsidised travel expenses; events closer to the site) would reduce this feeling of isolation from the rest of the organisation. 2. Have 'proportional attendance' by management across sites. Many individuals in the satellite sites felt that they did not know their manager, but having regular access to management would help this issue.	Primary	Yes (1.4)
		Primary	Yes (1.1, 1.2, 1.3)

As clearly summarised in **Table 28**, a number of feasible interventions and applications were identified throughout the Appreciative Inquiry process. Upon presentation of the research findings and change/implementation processes to senior management within Service 6, a number of action plans have been implemented by this senior management team (see **Table 29**). The following will detail the interventions put forward, how they relate to the Local Stress Theory and other outcomes from the research, and whether they relate to primary, secondary or tertiary stress management approaches. Lastly evidence as to whether or not the action

plan has been implemented is given, as well as a figure as to how the action plan relates to **Table 29**, which provides the evidence for action plan implementation.

With respect to IT, two particular action plans were proposed out of the AI process. The first of these related to an increased level of, or better targeting for, IT training in order to ensure that only IT training actually required by employees were delivered. The second proposal included having individual training 'champions' with a good level of IT literacy who could pass knowledge to colleagues who require help with specific IT issues without having to wait for help from IT specialists, or ask for help from management. These two proposals were taken on board by management and implemented into a number of action points (see **Table 29, No. 5**). The first of these action points, to be completed for all employees within Service 6 within one month of the action plans being published, was to ensure that IT training needs specific to each employee were analysed via personal development planning and SMART objective setting. Similarly the IT training needs specific to particular teams throughout Service 6 are to be identified and addressed. Thirdly before any new IT software or hardware is implemented the training needs of staff will be assessed and training delivered as necessary. Finally, a number of training champions (or officers as they will be titled in the organisation) will be assigned across the Service in order to provide individual support to employees as necessary.

Of the action plans for email, each suggestion put forward has also been implemented. As per Action Point 2 in the 'Email' section of **Table 28**, individual employees were often interrupted in their work by the arrival of a number of emails of a variety of importances throughout the course of the work day and thus interrupting concentration. In order to improve upon these factors, two actions have been implemented into Service 6 (**Table 29, No. 2**). Employees have been advised how to turn off email alerts and staff have been given permission to

concentrate on work while ignoring emails unless they are designated 'Important' (which is also to be actioned upon). Also an email 'buddy' system has been put in place in order to ensure help with important emails should an employee be off work for a period of time has been developed, and targeted email groups have also been set up to again ensure unnecessary emails are not sent to the wrong individuals in the Service. Finally, management at each level throughout the Service are currently encouraging the use of verbal communication strategies, rather than email, in order to improve upon communicative efficiency.

Furthermore with respect to bottom-up communication, a number of feasible interventions were located which had the potential to improve upon individual workplace experiences (**Table 29, No. 4**). The first of these included a method of enhancing bottom-up communication by allowing employees to put forward anonymous suggestions and constructive ideas as to how the Service could be improved. This has been implemented by putting a number of suggestion boxes in communal staff areas throughout the participating service to allow for anonymous and constructive ideas to be suggested. Secondly, the most powerful and positive method identified as being able to improve bottom-up communication was the use of appropriate team meetings. Therefore by ensuring management keep track of objectives and outcome actions and having these points brought forward to senior management meetings, team meetings would be able to provide vital bottom-up and top-communication. Ideas that are generated from both of these processes are to be encouraged and implemented by senior management, with each idea given feedback as to the feasibility of newly suggested ideas in any of these actioned-upon points.

The fourth area in which organisational improvements have been identified referred to the help available for individuals should workplace stress become a source of tangible/emotional discomfort. This area, entitled 'Help

Available for Stress', led to just one action plan designed, although two were implemented by the senior management team (**Table 29, No. 3**). As suggested, Human Resources were tasked to share the help that is actually available, as well as detailing information as to how this help could be accessed. The second action point (as detailed by senior management alone), was to task an individual in each of the towns that the Service works with the role of 'wellbeing representative'. The role of this individual is to share information as to how wellbeing can be maintained or improved where necessary, as well as providing a confidant outside of the senior management and/or human resources that individuals could turn to.

The fifth set of action plans proposed was directed toward the feeling of isolation for employees based in the Services' satellite sites (**Table 29, No. 1**). The first of these plans would be to have more proportional representation by senior management in these removed sites, as well as having attainable invitations to corporate functions. Along these lines, the action points enforced included consistently increased management presence in the satellite sites, with these managers also making themselves increasingly available for enhanced bottom-up and top-down staff communication. Also, some staff and corporate functions will be held in the town within which the satellite sites are located.

Two further points, identified as daily stressors for individuals throughout the Service although in particular to those in the satellite sites, as discussed with senior management in meetings were also acted upon despite initial criticism. There were clear and present problems with accessing the organisational intranet, needed for many corporate and personal functions such as accessing payslips. Prior to the action plans being presented to senior management access to these systems was restricted to employees unless they were within the workplace, an issue for those who are customer-focussed rather than computer-based. Following action plan implementation

employees can now access the company intranet remotely from their own home, or other computers outside of the organisation thus improving greatly upon these issues (see **Table 29 No. 6 and 7**).

Table 29: Management responses to suggested interventions.

Issue	No.	Management Response	Lead	When?
Satellite site feeling of isolation and separation	1.1	Regular presence of management responsible for these sites.	Head of Service 6	Ongoing
	1.2	Satellite site management team available for staff discussions and feedback.	Satellite site management	Ongoing
	1.3	Head of Service 6 to make regular visits to service and increase interaction with staff.	Head of Service 6	ASAP & ongoing
	1.4	Ensure deliverance of corporate events at satellite sites as well as main site.	Head of Service 6	As required
Number of emails and too many emails to reply to	2.1	Advise how to turn off email alerts during busy periods.	Head of Service 6	June 2012
	2.2	Encourage email buddy system for when staff are away.	Whole of Service 6 management team	July/Aug 2012
	2.3	Encourage face-to-face rather than email communication.	Whole of Service 6 management team	Ongoing
	2.4	Permission for staff to turn off emails when busy (although other forms of communication necessary in case of emergency).	Whole of Service 6 management team	Ongoing
	2.5	Use of 'urgent' emails to allow for easier prioritisation for	Whole of Service 6	Ongoing

		emergency/unplanned tasks.	management team	
	2.6	Encourage use of appropriate email groups where possible.	Whole of Service 6 management team	Ongoing
Help available for workplace stress; how this information is accessed	3.1	HR to share information about help that is available and how to access this.	Service 6 Business Partner	ASAP
	3.2	Introduce a wellbeing representative for satellite sites as well as main hub.	Human resources	ASAP
Opportunities for two-way communication; cannot put forward ideas; do not feel as though ideas are acted upon; use of team meetings	4.1	Suggestion boxes in communal areas. Ideas discussed in management meetings.	Head of Service 6	In place
	4.2	Team meetings to encourage 2-way communication. Feedback discussed by Service 6 management and shared throughout the Service.	Whole of Service 6 management team	Ongoing
	4.3	Agendas and action points from team meetings shared on Intranet and feedback shared with all staff.	Whole of Service 6 management team	ASAP
	4.4	Ensure staff suggestions taken forward as part of any review/restructure and staff are able to influence the outcome.	Whole of Service 6 management team	Ongoing
IT training & systems	5.1	Use SMART and PDP to identify IT training needs.	All staff & line managers	By June 15 th 2012
	5.2	Group assessments of training needs & appropriate training packages put together.	Whole of Service 6 management team	By July 31 st 2012
	5.3	A senior manager will be appointed	Human	Done

	5.4	responsibility for IT training across the Service. Training needs identified and addressed prior to implementation of any new system.	Resources Human Resources	As required
Access to IT; Access to Intranet	6.1	Intranet available at home to all for access via personal internet connection.	Service 6 Business Partner	Done & circulated
Delays in getting payslips	7.1	Access to intranet at home allows viewing and printing of payslips.	Service 6 Business Partner	Done & circulated

As is demonstrated in **Table 28** (and the corresponding **Table 29**) each of the suggested interventions derived from throughout the AI process were taken on by senior management in Service 6, with senior management from throughout the Service and human resources department taking the lead to ensure that the suggested changes were to be implemented fully and correctly. The first reflection to make however is that each of the changes are primary organisational change initiatives - therefore they are designed to impact upon the stressor facing employees, rather than on how the individual copes with these issues. The only partial exception to this is information is shared with employees as to the help which is available should they become overly stressed in the workplace (points 3.1 and 3.2 in **Table 29**). While the organisation is changing processes by making this information available in both hard copy and online via the organisational intranet, the help that is made available may still be secondary (to increase coping) or even tertiary (to get employees back to work after a period of illness) in nature. Despite this the actual intervention implemented by management, in which human resources would explicitly make available information on the avenues employees could go down for help with issues of this nature is a primary change. Secondly a wellbeing 'champion' responsible for helping employees deal with stress

was to be appointed to work with the satellites of the organisation, a role performed previously by volunteer employees in the main 'hub' location but not outside of this (**Table 29, No. 3.2**).

2) The Researcher in the Research Process

There is some discussion within various literature sources as to the impact that a researcher/practitioner's stance within an applied research project can have on the outcome of studies. This discussion, described as the differences between an 'insider' and 'outsider' researcher and the impact that these positions can have, is especially pertinent in certain organisational change works. For example, Humphrey (2007) reflects upon her experiences of working within multiple positions insider-outsider positions in an action research project. Similarly Kidd (2009) found that the ambiguity of belonging to both the insider and outsider groups to be confusing, and yet ultimately liberating.

Within research such as that presented in the current thesis, an insider would represent someone from within the participating organisation who played an active and meaningful role in the research process. These people would therefore be actively involved in the implementation and outcomes of a program. Alternatively an outsider would represent an authority external to the PAO whose role is to design changes to be brought to senior management for the improvement of particular organisational systems (e.g. Hurley et al., 2002), and as such is someone who is outside of the goals of the organisation. It is clear that in the presented work the lead researcher was an outsider to the PAO, and thus performed two distinct outsider roles. Firstly this individual was a visiting practitioner within the PAO, charged with the task of designing interventions to improve employee wellbeing.

Secondly was the task of a researcher and PhD student at Anglia Ruskin University - a role that was made clear to all in the PAO and participating employees.

Hurley et al. (2002) describe a number of advantages and disadvantages to being an outsider to an organisation within research such as that presented here. Outsiders can bring fresh new approaches and ideas to an organisation as they are not limited by an organisational view of the problems faced. This point is certainly pertinent within the presented research, with the only pre-determined remit of the work being that an emphasis would be placed upon the improvement of employee stress in the workplace. Secondly it is through the veil of anonymity (where possible, and attached confidentiality) that an outsider can bring, open and honest feedback is encouraged. This was a point that was assumed to be particularly important to employees, and was constantly reiterated explained to participants throughout the process; Indeed the log and survey phases were designed to ensure complete anonymity of answering for participants. Similarly outsider researchers have the potential to raise sensitive issues to management. This was highlighted in that some of the interventions brought to senior Service 6 management clearly meant changing the way that this management worked and potentially criticised these individuals. Whether this would have been possible for an internal researcher is questionable, since one of the findings of the study was that employees did not feel that their thoughts and opinions were taken on board. This illustrates that a complete insider, paid by and working for the PAO, would be likely to be reluctant to take the lead researcher within the presented work.

There are also disadvantages to working as an outsider however. These researchers need to spend more time developing links with appropriate insiders within the organisation, and in particular those individuals with the ability to make a project move and progress. Indeed within the presented work this identifying of- and utilising -

these individuals was the process which took the longest amount of time because it took approximately 12 months to identify these insiders. However, once they were identified and agreed to take part in the work the research phases occurred quickly and without problem. These insiders were primarily the wellbeing representative for the whole of the organisation and the human resources business partner for Service 6. Also the outsider needs to take the time required to understand organisational systems and procedures, with those who do not make the appropriate effort to know these systems and procedures running the risk of reporting already-known issues. This was again an issue - it was necessary to read through and become familiar with various organisational documents and procedures. Along these lines it was important to attend numerous meetings including senior management meetings, an organisational induction, wellbeing meetings, and even acted as a referee in an organisational-wide five-a-side football tournament which was organised by the wellbeing officer. Furthermore outsiders must rely on particular individuals within the organisation to implement the suggested interventions. Lastly this was key to the implementation of the suggested interventions. As an outsider the only way in which it can be determined whether the interventions have been implemented is by word from insiders in the organisation.

To summarise therefore each of the interventions that were designed through the AI process were quickly implemented into working within Service 6, with senior management taking on the responsibility of ensuring that the work is implemented. Each of the interventions that had been implemented were primary in nature and thus addressing the potential stressor at the source, rather than increasing individual resources available to deal with stress. Also it is clear that, as an outsider within the PAO, without the help of appropriate and powerful insiders within the organisation the work would have struggled from inception. Indeed these individuals were essential to getting the project moving.

Chapter X:

Discussions

Chapter X: Discussions

The first of two main objectives within this thesis was to develop a local stress theory for the assessment of areas of the workplace which are working well, as well as those not working quite as well. Combined qualitative and quantitative results led to the depiction of a thorough, representative local stress theory (see *Figure 20*). The theory asserts that there are three predominant stressors in the organisation which are mediated by three separate areas of the workplace which were 'working well'. Demands, namely the quantitative overload that individuals may face, is the first stressor in the theory. Secondly a lack of adequate Managerial Support, both in the amount of support available as well as the quality of support offered, is an acknowledged stressor. Lastly the way in which organisational change is managed and communicated, and in particular a lack of open and honest communication as to the effect that this change may have on job roles, was a clear stressor. While it is clear that these stressors are 'daily hassles' (i.e. every day events that may have a cumulative negative stress outcome for individuals), in line with the Stimulus approach to stress it is posited that any combination of these three stressors may be enough to overcome individual resources available for stress and therefore stress-related outcome (Burnout) may occur.

However, the Local Stress Theory also describes the buffering effect of three separate organisational systems and individual accomplishments. Therefore individual accomplishments at work (for example getting through a good amount of work in one work day), the relationships between individuals and the ability to be creative within each individual's job role are the three areas which were found to have the potential to buffer the experience of stress. These were areas that were 'working well' throughout the quantitative (where measured) and qualitative research procedures.

The interaction of the individual with each of the stressors and buffers is important to stress-related outcomes. In line with the stimulus approaches to workplace stress, should the stressors become too much for the individual to cope, despite the work of the organisational buffers, it is expected that stress-related outcomes may occur. Indeed, the results of the first organisational survey suggested that burnout had occurred within 10% of the respondent population. Similarly however it is acknowledged that the transactions between an individual and the work environment, and the subjectivity inherent within this approach, is an important consideration (see **Section 4** of this chapter).

The second thesis objective was therefore to develop appropriate intervention strategies based on the views of staff throughout the participating public-sector organisation. The methodology of choice was Appreciative Inquiry. Following completion of the research and analysis of results, AI has been shown to be a strong methodology for the design and implementation of organisational-level changes (see **Chapter IX, Section 1**). Indeed, **Table 29** shows the results which have been implemented within the organisation as a consequence of this study. Each of the suggested interventions were implemented (see **Table 29**) in order to act upon many of the most feasible interventions as put forward by employees. The AI approach was therefore effective as an organisational change methodology, particularly when the focus of the approach is to improve upon employee health and wellbeing.

1) Strengths & Limitations

A number of strengths and limitations of the presented thesis have been identified. One limitation of the researched area in general regards the vast breadth and depth of organisational and psychological research which

has been conducted in the majority of the areas covered throughout this thesis. For example, as depicted in **Table 1** a brief literature search for terms related to the work gave a large number of potential journal article results. Similarly there are a number currently-popular related concepts such as resilience and engagement which could have been included in the research, but were not. This means it has been difficult for the presented research to attempt to take into account each of these influential models, theories and research. Despite this limitation, the work presents a comprehensive and critical understanding of the literature relevant to the project, as well as adding new knowledge to the existing literature (see **Chapter XI, Section 2**). Therefore appropriate considerations were taken with respect to methodologies based on the literature review outcomes. Indeed, the Appreciative Inquiry methodology is one of the ways in which originality and new knowledge addition is ensured in the work. While Appreciative Inquiry has previously been successfully utilised in both community and occupational settings to look at subjects such as communication and productivity, the comprehensive literature review showed that AI techniques have not been reported as a method of organisational improvement for occupational stress (and in particular daily hassles) within the reported literature search.

One of the limitations of the presented research and thesis is in the development of a local stress theory following the completion of research and analysis. The presented research does not take into account emotion-focussed individual coping mechanisms as described within the Transactional theory of stress (see **Chapter 2, Section 1a.3**). Research has found that both problem-focussed and emotion-focussed approaches can help individuals to improve upon the experience of stress (e.g. Bond & Bunce, 2000), and this is therefore a potential area of future research.

However, problem-focussed and emotion-focussed coping mechanisms (see **Chapter II, section 1a.3.1**) are difficult to take into account with primary organisational change processes. Strategies to improve emotion-focussed coping equate to secondary and tertiary approaches in which efforts are made to improve individual coping mechanisms or recovery following a negative reaction to stress. However problem-focussed coping, in which the employee makes attempts to change the working situation in their favour in order to improve workplace stressors, would equate ideally to primary methodologies. For example, the presented study asked individuals for methods by which they could feasibly change their own working situation in their favour, with these experiences taken into account throughout the AI process. Despite this, the work could not be explained as specifically related to problem-focussed coping because the individual does not actively make attempts to change the stressor for themselves, rather any changes were designed as a group and implementation assisted by management.

A further limitation of the study can be assumed with regard to the use of quantitative surveys. The first such issue regards utilising traditional 'deficit-based' questionnaires alongside an Appreciative Inquiry methodology. AI techniques involve positive discourse, seeking to find out what is working well in an organisation (see **Chapter VI, Section 1b.2** for the assumptions of AI), whereas the survey tools utilised attempt to find out the problems within an organisation. However, in response it is clear that the results of the survey were utilised in a manner appropriate with the AI process, with positive results being fed back only. Therefore where results needed to be disseminated to staff or the organisation as a whole they were reported in an affirmative manner, looking at what is working well, as opposed to the areas of the workplace that need improvement.

While the general arguments for the use of qualitative, quantitative and mixed methods are analysed previously there are also a number of potential issues with regard to the use of the qualitative approaches utilised.

The first phase of the AI research process was the daily log phase (see **Chapter VIII Part 1, Sections 1 and 2**), in which individuals were asked to briefly answer just four questions at the end of their work day. One issue associated with the use of brief-answer daily logs is that limited information may have been gathered from the process. Individuals were asked to answer just four questions, designed to take up just a few minutes of participants' time at the end of each work day. The short length of time with which individuals are asked to answer could have meant that either very little information was gathered during this phase, or that the answers gained have been superficial and lacking in detail. Furthermore, asking individuals to complete the logs at the end of the work day has the possibility of answering 'in the heat of the moment', when they are still angry or upset from the events of the day.

Despite these potential issues, it is contended that the results of the log phase, as well as precautions built into the research process, means that the potential issues are overcome. The results of the log phase provided a strong depth and breadth of data with respect to the daily hassles faced by individuals in their work day, meaning the daily log approach to opening an investigation into the daily hassles within the present public sector organisation was an ideal starting method. Also, asking individuals to complete the logs at the end of the work day when the events are freshest in the individual's minds meant that little information will be lost due to time degradation which may occur if answering 12 to 24 hours after the day had finished. In addition to this more traditional diary approaches are likely to focus on aspects of an individual's day which have not gone to plan (for example Massey et al., 2011 looking at the impact of headache on psychological well-being; and Payne, Jones and Harris, 2010 who looked at the impact of work stressors on intention to exercise), whereas the focus on positive experiences and improvements effectively removes the potential for 'heat of the moment' reflections on the work

day. Finally, the information gathered from the logs is immediate, focussing on the work day that has just finished and discovering examples of positive events. This is in stark contrast to both the interview and focus group phases which look for examples of events which have occurred over a longer period of time (Reis & Gable, 2000).

With respect to the interview process, one of the methodological issues relates to the appreciative nature of the study. The conventional premise of semi-structured interviewing is that interesting and important developments throughout the process can be investigated in further detail, allowing divergence from the pre-set agenda. Therefore, despite the interview agenda focussing on the positive aspects of an individual participants' past experiences, the process would potentially allow the interviews to become an opportunity for individuals to 'vent their frustrations'. Therefore the role of the interviewer was not solely to ask questions and gather important data, but to facilitate and control the interview process and maintain the emphasis on the positive where possible. For researchers without the necessary facilitation skills this would be difficult, although the lead researcher within the presented study has the skill and experience to ensure good interview outcomes

In a critique similar to this, the utilisation of focus group methodologies within appreciative techniques can be laced with difficulty. While the premise of focus groups is to generate ideas and knowledge from the understanding of shared group experiences, an unhappy group of participants can potentially take group discussions as a chance to be destructive, illustrating problems they may have encountered, rather than constructive and thus appreciative. Again therefore the skill of the lead focus group interviewer as a facilitator of the positive, helping to tease together the positive examples and potential improvements, was important within the process. As such recognition of when the group discussion is becoming negative, and as such not helping to build on the positive exceptions, is a potential issue which may be difficult for researchers to identify. Also, keeping

to the allotted schedule and adhering to time limits is important to ensure that the discussions stay on-topic, while also allowing individuals to be creative within the group environment. These are potential issues with focus group methodologies which could be applied to the current research. However, the lead researcher's experience of teaching and individual interviews combined to ensure the smooth running of both focus groups (see **Chapter VI, Section 2e.1** for an analysis of the use of focus groups).

The AI methodology used to gather qualitative data from semi-structured interviews and focus groups as utilised in order to analyse the data gathered require the researcher to work without pre-existing bias in order to gain the most important data possible. Therefore throughout the AI process it is important for the facilitator of the interview processes to remain neutral, allowing the participants the opportunity to bring forward positive solutions and 'knitting together' concepts and ideas as they emerge (for example see **Chapter VI, Section 1b**). This is, however, one of the most controversial aspects qualitative working with some arguing that the removal of this bias is impossible. While it is possible that this allegation could also be levelled at the present work, there have been a number of precautions taken in order to prevail over the potential criticisms. For example, participants in both the interview and focus group phases were offered the opportunity to check over the analysis should they feel necessary. Similarly results were fed back to all individuals in the participating service, including the individuals who had previously taken part in the study, and asked to comment on the analysis.

One potential limitation with the methodology employed relates to the evaluation period utilised to assess the impact of the AI methodology, and in which the newly theorised 5th 'D' is located. Research (McVicar, Munn-Giddings & Seebom, P., 2012, *in press*) has demonstrated that a period of at least one year is required to assess whether or not a primary change intervention has impacted upon organisational outputs such as sickness absence,

absenteeism and employee efficiency. Despite the theorisation of a fifth 'D' to be added to the AI cycle, the presented research did not include an evaluative stage of the results within the research cycle. This would therefore fall into the trap of many other change methodologies which have been criticised for the lack of an evaluation of either the methodologies used or the interventions implemented. However, the process which the work went through was an effective and valuable one. The results gained were implemented by the participating organisation (see **Chapter IX**), with this uptake alone suggesting a potentially impactful and valuable process.

A further possible methodological issue relates to the number of participants that took part in the study, tied in with the use of mixed methodologies. The mixed methods utilised are time-consuming and require a good amount of researcher training (Howitt & Cramer, 2007) to ensure they are conducted correctly. Also the use of mixed methods, as well as a relatively small number of participants during the AI cycle, means the results of the work cannot be generalised to other organisations outside of that participating. Despite this having a quantitative response rate of close to 70% within the participating Service, and a response rate of over 30% within the qualitative elements, a good response rate for the participating Service 6. Also one of the main objectives of the work was to design a *local* stress theory, rather than one that could be applied to other organisations, and thus the utilisation of these methods was valuable.

2) Research Questions

2a) Research Question 1

“Can the results of a participatory Appreciative Inquiry methodology be successfully implemented into a local borough council organisation?”

Research question 1 was designed to determine whether organisational interventions designed via the participatory AI process could be successfully implemented into the participating organisation. AI is a participatory approach which captures the values and beliefs of individuals as experts in their own situation, allowing the development of a vision for change (Atkin & Lawson, 2006). **Chapter III, Section 1f** explores points which distinguish participatory research from 'traditional' research approaches, and the presented research satisfies many aspects of these points making the AI process at least partially participatory. How the presented research addresses each of these points is as follows:

- 1.** Centrality of the participant to the research: while the lead researcher in the presented work acted as 'facilitator' through the work, the participants' knowledge and understanding of their own working situation provided the data for the presented research. Also results were fed back to participants in order for them to 'member check' the outcomes.
- 2.** A commitment to changing the balance of power: Participants were empowered to describe the areas working well as well as those requiring improvement throughout the AI process, and in the development of organisational improvements. Despite this, management acknowledgement and input was required in order to implement said changes, although the changes would not occur without employee participation.
- 3.** Participation in all stages of the research process: while the presented research included participants in many of the stages of the research process, it was not possible to have them participate in all. For example, the wider area

requiring change (i.e. daily hassles) was agreed upon with higher management within the organisation prior to the research beginning, although the particular areas requiring improvement and interventions designed solely by participants. Individual interview data analyses were referred back to participants for comment on the overall outcomes, and group interview data was analysed alongside participants.

4. The production of 'useful' knowledge: from the way in which questions were asked throughout each of the AI research phases it is clear that there was a focus on the production of 'useful' knowledge. Indeed the focus group discussion agenda was purely on how particular areas of the workplace can be improved, thus leading to the development of detailed and feasibly achievable action plans for change.

5. A commitment to action: there has been a clear commitment to action throughout Service 6, from top management who allowed and facilitated the implementation of changes to participants who have bought into the change process (for example see **Chapter IX** to see how the interventions were implemented).

Authors such as Northway (2010) and Diaz and Simmons (1999) argue that while 'pure' participative approaches would satisfy each of the aspects listed above, there is a certain amount of flexibility in the type of methodology which could nonetheless be labelled as participatory (such as that taken in the presented research). Indeed, very few participatory research projects which are self-declared as participatory fulfil each of these criteria, and the presented research clearly fits into this category. The work is clearly therefore participatory, but not a 'pure' participatory approach as described by Northway (2010).

With particular reference to answering Research Question 1, whether the interventions could be successfully implemented into the organisation, it is clear from **Table 29** that the methodology used was indeed successful. The proposed interventions were all implemented into the organisation by management within a workable

timescale. However, whether or not the outcomes of this research have made either a positive or negative impact on stress-related outcomes is impossible to distinguish for a few different reasons. For example, a review of participatory research has indicated that in order to adequately be able to evaluate a change strategy a period of at least one year should elapse between intervention implementation and attempting to evaluate the impact that these interventions have had (McVicar, Munn-Giddings & Seebom, P., 2012, *in press*). Similarly, there are a wide variety of potential confounding variables which could easily have as much, if not more, of an impact than the interventions implemented via the presented study. Differences between Survey 1 and Survey 2 show that the participating organisation (PAO) is fast-moving and dynamic and it can be argued that the antecedents to these organisational changes can strongly influence organisational outcomes, although it is likely that these would be covered in the 'major life event' approach, rather than that of daily hassles. Along these lines political changes throughout the UK have meant changes to UK public-sector organisations, which include political changes to the PAO. Similarly financial changes to the participating organisation mean a number of employees had been made redundant throughout the period of study, with demographic information for Survey 2 presented in **Chapter VII Section 3a.1** showing that the number of employees had reduced by approximately 48% over the 12 month period in which the presented research has taken place. It is therefore difficult to determine at this point whether or not the interventions implemented from the presented research have impacted upon employee experience of stress. Despite this, results gathered have provided strong emphasis on changing many sources of daily hassles for employees within the participating department.

2b) Research Question 2

“What are the sources of day-to-day stress (i.e. ‘daily hassles’) for employees in the borough council.”

This second research question sought to discover the sources of everyday stress, or ‘daily hassles’ (hassles are first introduced in **Chapter II, Section 1a.3.2**), as experienced by employees within the participating organisation. These sources of daily stress were investigated primarily via two of the three qualitative aspects of the study: daily logs and interviews. Analysis of daily log results revealed a large number of daily hassles were impacting upon individuals’ experiences in the workplace. The predominant daily hassles found were done so with respect to issues with IT systems, high workloads, communication problems between employees and management, and problems with training dissemination and targeting.

The first of the three concordant areas from the two phases of the study was related to IT systems and training available to employees within the organisation (see **Chapter VIII Part 4, Section 8**). The most commonly and passionately cited IT problems were a lack of IT infrastructure, or IT systems which do not work adequately. Individuals throughout the log and interview phases often related to the daily stress associated with having to wait for IT systems which are working much slower than they should be, or IT systems which inhibit individuals’ abilities to be productive and efficient. A separate yet related issue regarding IT infrastructure is the training available to existing employees. It was widely agreed that throughout the participating service individual employees have a range of IT skills and abilities, and while basic training was available for all employees for a range of IT systems, more intense training should be targeted toward those who have poorer IT skills thereby not

‘wasting’ training on those who it would not benefit, and vastly improving upon their effectiveness and efficiency within the workplace.

A second concordant area from log and interview results is to do with the use of email in the organisation. The strongest participant reaction to issues with email regarded the over-use and over-reliance on email as the primary source of information within the organisation, for both top-down and bottom-up communication, as well as lateral communication among peer workers. Therefore individuals often received too many irrelevant emails, including those not strictly for the actual recipients. Similarly, it was felt that there was an over-reliance on using email as the primary source of communication with others in the organisation. Also along these lines the majority of lateral communications among peers who often co-habit the same working office were done so via email. This was despite a clear knowledge that verbal communications would be quicker and resolve issues in a more complete way.

A third response with respect to email faced employees when they would have a period of time off from work. When returning to the workplace after sickness or annual leave employees would have extremely large email inboxes which take hours to prioritise and organise, and have often missed important emails which require immediate attention. Therefore the stress of having to deal with potentially very important emails which are days overdue is created when individuals are away from work for an extended period of time. The final stressor associated with email was faced only by those working within ‘satellite sites’ which are removed from the heart of the organisation. These individuals often had problems accessing the IT systems necessary in order to allow email access. While these individuals would therefore not receive important emails to their work email addresses it

would still be a hassle for individuals when wanting to check and access work emails, which also could not be accessed from home computer systems.

The final concordant area found with respect to the qualitative data results was described by many as 'bottom-up communication', i.e. communication from employees up to management level. However, further analysis discovered that the issue was not only bottom-up communication, but other communication of types not already described. With respect to bottom-up communication, individuals often felt unable to speak directly to management and even feared reprisals should they attempt to contact management directly as it was perceived by some staff that employees should never directly contact higher management. Along these lines it was described that while team meetings present the perfect opportunity to disseminate information upwards they were often not fit for purpose. Participants described various team meetings as being more a social opportunity than work-related one, or that various management used team meetings to put employees down rather than share information.

As well as these three concordant areas, however, there were two further issues deemed to be important as discovered from the semi-structured interview analysis. The first of these areas is labelled "Help Available for Stress". Throughout any large organisation there are likely to be various policies and procedures should employees feel that workplace stress is becoming a burden, and impacting either their working effectiveness and/or home life. While the participating organisation has such avenues, policies and procedures, employees felt that they either did not have access to them or simply did not know what the policies/procedures entailed.

The second result unique to the interview phase has been categorised as "Satellite Sites Feeling Removed". As demonstrated in **Chapter V Section 2** the PAO is a large public-sector organisation consisting of over 1,000

employees spread across six 'Services'. The present study took place within one of the six service areas, Service 6, which comprised approximately 181 employees spread over a number of sites at the time of data collection. The majority of sites are situated in one borough within the East of England, with approximately 40 further employees spread over three sites approximately 20 miles away from the majority. The individuals who work some distance from the main 'Hub' of the organisation had a distinctive stressor facing them on a daily basis. They felt a distance from the main organisation, with the issue due to two main problems: a perceived lack of management support due to a lack of management attendance in the separated sites, and the geographical distance meaning these employees cannot interact with others at corporate functions etc which are all held at the main town within which the organisation operates.

2c) Research Question 3

“Can an AI methodology be used to design feasible psychosocial stress interventions for the improvement of daily hassles within a local borough council organisation?”

This third research question is designed to assess the suitability of utilising the AI research process in the design and assessment of organisational interventions as designed to improve upon the experience of daily hassles within the participating organisation. AI is an empowering, participant-led methodology which allows employees as participants to come up with change interventions via the use of positive discourse (see **Chapter VI, section 1b**). The presented thesis utilised an Appreciative Inquiry methodology in order to assess, design and implement interventions to improve upon the experience of daily hassles as evidenced by employees of a public-sector

organisation in the East of England. The AI process utilised daily logs and semi-structured interviews to identify areas working well as well as a beginning to the intervention development process. These results fuelled the focus group agenda, in which feasible action plans for the implementation of interventions were designed.

As depicted in **Tables 28** and **29** and explained through **Chapter IX Section 1**, it is clear that the AI approach has helped to design a number of useful and feasible interventions to improve upon employee experience of stressors in the workplace. These interventions spanned a variety of worksites, job roles and psychosocial stressors. Therefore the AI methodology unambiguously accomplished the goal of designing feasible interventions, which were then implemented into the organisation.

3) Results & Previous Research

3a) Survey 1 vs. JDCS

According to the Job Demands-Control-Support model of workplace stress an employee is most likely to experience negative stress-related outcomes should they experience high levels of Demands in addition to low Control and inadequate Social Support (see **Chapter II, Section 1b.1**). The presented study utilised the Management Standards Indicator Tool as a measure of the potential psychosocial hazards faced by individuals within the participating organisation, and the Maslach Burnout Inventory-General Survey as a measure of the potential psychological impact of these measured hazards (see **Chapter IX, Sections 2a** and **2b** for a critical discussion of both the MSIT and MBI-GS). Survey 1 results (see **Chapter VII Sections 1** and **2**) show that, in accordance with the JDCS model, (Management) Support, Control and Demands each had a significant impact on

Professional Efficacy. Similarly, Exhaustion was found to be significantly impacted upon by Demands and Control, again accepting part of the JDCS model. However, results also suggest that Role as measured by the MSIT impacts significantly upon both Professional Efficacy and Cynicism, while Change also strongly impacts upon Cynicism.

The JDCS is one of the most often-utilised model of workplace stress and has been applied in a variety of workplace settings. The model has also been taken into account in numerous studies of stress and stress-related outcomes, such as the Whitehall-II studies. Indeed the Whitehall studies are amongst the most influential pieces of research to demonstrate that high demands in combination with low levels of control has an impact on individual health and wellbeing (Marmot et al., 1991). The results of Survey 1 from the presented work therefore partially agree with the posited JDCS model in that Demands, Control and Support each played a part in the experience of Burnout.

Despite this there are elements of the presented findings which diverge away from the JDCS, including the finding of Role impacting upon both Professional Efficacy and Cynicism, and change also impacting upon Cynicism. These seemingly divergent findings can be explained in a number of ways. First of all the authors of the JDCS have argued from its inception that the model was never designed to be a theory which fully explains all of the antecedents for workplace stress (Theorell, 1996). Despite the JDCS being so widely utilised in workplace research however, various studies have demonstrated that factors outside of that included within the JDCS impact upon the factors inherent within Burnout and also concur with the results of the present study. For example, in a sample of 251 doctors and nurses role conflict and ambiguity were both found to be associated with the burnout variables Emotional Exhaustion (Exhaustion), Depersonalisation (Cynicism) and Personal Accomplishment (Professional Efficacy) as measured by the Maslach Burnout Inventory (Tunc & Kutanis, 2009).

Furthermore it is possible that due to the differential nature of the MSIT that some of the results were unexpected. For example the MSIT includes three different types of social support measurement (Peer Support, Managerial Support and Relationships) whereas the JDCS simply describes social support. Similarly while Control and Demands are also assessed within both the MSIT and JDCS, Role and Change are both assessed within the MSIT also.

Qualitative data analysis outcomes from the presented study support the notion that both Demands and lack of Peer Support are indeed stressors faced by employees in the participating organisation. As is suggested in the JDCS demands (in the form of workload and the work environment) had a significant negative impact on the experience of daily hassles. Indeed analytical results described Demands as having a clear impact on the experience of stress, whereas Control had no such effect. Again agreeing with the JDCS Peer Support was found to have a buffering effect on the experience of stress – colleagues could negate, or remove, some of the stressors. Similarly Managerial Support (or lack thereof), which could be seen as a part of the social support aspect of the JDCS, was also found to have a negative impact on the experience of stress.

However, the AI process also revealed that a number other aspects of the workplace also played a strong part in the experience of stress. These factors include inadequate organisational communication techniques, with an over-reliance on the use of electronic media, and a lack of two-way communication, both playing important parts. These are clearly aspects of the workplace which are not readily assessed in studies which take a solely JDCS-orientated approach, as many contemporary research studies have done. Along these lines the qualitative aspect of the work found no place for Control in the work. Control is seen as a major mediator of the stress

experience within the JDCS, and despite the subjective nature of the presented study allowing participants every chance to discuss problems relating to Control, it was not discussed as an issue.

The results of both the qualitative and quantitative aspects of the project therefore suggest that, despite many researchers and research studies providing strong evidence for the JDCS, a wide-scale re-evaluation of the model is required. As was originally suggested by the authors of the model (Theorell, 1996) and as a criticism often levelled at JDCS researchers (Jones et al., 1998) it is suggested that the scope of the JDCS is too narrow to adequately cover many of the aspects of the modern dynamic workplace which can lead to the experience of stress.

3b) Overall Survey Results in Relation to Previous Studies

The presented study is one of the very first to utilise the MSIT as a measure of psychosocial workplace stress hazards alongside a measure of chronic stress-related outcomes (see attached journal article currently in press, *Appendix 12*). However, multivariate linear regression analysis results from the current study, in addition to results from two other contemporary studies, are demonstrated in **Table 30**. Results largely suggest that the findings of the three studies are similar, although with obvious inevitable differences. It is worth noting that the two comparison studies were chosen because they both utilised a version of Maslach Burnout Inventory which is akin to the Maslach Burnout Inventory-General Survey. Additionally it should also be noted that the Management Standards Indicator Tool is a relatively new therefore and under-reported psychosocial hazard survey tool meaning

that there are very few papers which have looked at the MSIT alongside psychological outcome measures, and in particular measures of Burnout.

Table 30: How the results of the present study compare to previous studies.

Study Source	Burnout Tool	Stress Tool	MBI-GS Factors	Related Stress Factors
Survey 1 Results (Present Study)	Maslach Burnout Inventory-General Survey	Management Standards Indicator Tool	Exhaustion	Demands Control
			Cynicism	Role Change
			Professional Efficacy	Managerial Support Role Control Demands
Escriba et al. (2006)	Maslach Burnout Inventory	Job Content Questionnaire (Karasek & Theorell, 1990) & 3 physical workload items	Emotional Exhaustion	Psychological demands Job control Supervisors support Peer support
			Depersonalisation	Psychological demands
			Personal Accomplishment	Job control
Brouwer et al., 2011	Maslach Burnout Inventory – Educators Survey (Dutch Version)	Factors from various questionnaires	Emotional Exhaustion	Job demands Job control Social support
			Depersonalisation	Job demands
			Personal Accomplishment	Social Support

As is expected in research which investigates a subject as subjective as psychosocial workplace stress, there are inevitable differences in the results of the three studies as described in **Table 30** above. It is worth noting that the results in **Table 30** reflect the outcomes of Survey 1 analysis because this is where more participants, and a larger percentage of employees, took part. For example, all three studies found that both Demands and Control are significantly associated with Exhaustion (MBI-GS) or Emotional Exhaustion (MBI), therefore having a significant impact in each of the three proposed models. However, both Escriba et al. (2006) and Brouwers et al. (2011) describe support as also impacting upon Exhaustion, a finding that was not supported with results from the present study. A further distinction between the presented results and the other two studies is described by the two quoted studies both finding strong associations between Depersonalisation (Cynicism) and Demands, whereas the findings of the presented study indicated Role and Change as the only two outcomes associated within the model.

The biggest disparity between the findings of the three studies, however, was in the findings for Professional Efficacy (personal accomplishment). While both the presented study and that published by Escriba et al. (2006) found Control to play a significant impact on the outcome measure, Brouwers et al. (2011) found that Social Support was the only associated factor and thus again agreeing with part of the findings here. However, while the research by Brouwers et al. (2011) only decried social support as the associated factor, a similar and yet intricately different factor to Managerial Support. This therefore highlights one of the advantages of using the MSIT over other survey tools because it differentiates between three 'types' of support, which would otherwise have been described a Social Support in other tools or completely overlooked. Similarly the presented study also found that Role played a strong part in the Professional Efficacy outcome model. This divergence in views and findings therefore means that further research may need to be conducted into the antecedents of Professional

Efficacy/Personal Accomplishment, especially when compared to the relative near-consensus with the other two MBI factors.

3c) High vs. Non-High MBI Scorers

Traditional notions of stress assume that the subjective experience of chronic workplace stress increases the likelihood of developing related negative outcomes (see **Sections 1a** and **1b** of **Chapter III** for a discussion of various individual health and behavioural outcomes associated with chronic stress). For example, the INTERHeart (Rosengren et al., 2004; Yusuf et al., 2004) and Whitehall-II (Marmot et al., 1991) studies are two of the most influential studies which provide evidence for a strong link between psychosocial stress experience and negative physical outcomes. Similarly however stress has been strongly associated with negative psychological outcomes, such as the experience of depression (e.g. Siegrist, 2008; Chen et al., 2009), anxiety (e.g. Radat et al., 2008; Melchior et al., 2007) and burnout (e.g. Lorenz, Benatti & Sabino, 2010; Hayes & Weathington, 2007).

One of the major findings of the survey element within this thesis agrees with authors such as Lorenz, Benatti & Sabino (2010) and Hayes and Weathington (2007) in indicating that those respondents who were experiencing high levels of burnout also experienced significantly increased levels of psychosocial stressors in the form of hazards, as measured via the MSIT. While MSIT results in combination with stress-related outcomes have rarely been disseminated in academic journal articles, there are a small number of growing publications which strongly agree with the findings of the present study.

Houdmont, Kerr and Addley (2012) found that individuals experienced significantly less psychosocial hazards as measured by the MSIT before the worldwide global recession than after. They also found that employee absences due to work-related stress, a clear outcome measure, were also significantly higher after the onset of the recession. Similarly the MSIT and an accompanying stress-related outcomes survey were completed by 707 employees of a community-based Health and Social Services Trust (Kerr, McHugh & McCrory, 2009). Indeed this was the first study to investigate the MSIT with stress-related work outcomes, and found that the MSIT factors were positively correlated with job satisfaction thus indicating that those respondents experiencing higher psychosocial health had increased happiness in the workplace. The MSIT factors were also found to be negatively associated with job-related anxiety, job-related depression and witnesses errors/near misses, therefore indicating that those with increased exposure to psychosocial risk factors scored higher on each of these three outcome measures.

3d) Action Plans, Primary Change & SSMC

In order to implement the changes as suggested in **Table 25** and subsequent **Table 28**, the lead researcher presented the outcomes to the key stakeholders and gatekeepers within the participating organisation. **Table 29** provides an anonymised table which describes the action points which have been acted upon by the participating organisation due to the outcomes of the presented study.

Primary stress management interventions are described by Ivancevich et al. (1990) as those which are designed to change the organisation and organisational systems, rather than attempting to increase coping capabilities (secondary) or recovery following negative stressful outcomes (tertiary). These primary strategies are

more effective and long-lasting than secondary or tertiary approaches (e.g. Ongori & Agolla, 2008), but for a number of reasons are utilised much less (see **Chapter III Section 1e** for an overview).

As a typology of organisational change, soft systems methodologies for change (see **Chapter IV, Section 2a**), in which employees are the ideal vehicle for information gathering and implementing organisational system changes (Petkov et al., 2008), are often implemented in organisational change studies in which the principle anticipated outcome reflects upon employees. Therefore as an organisational development and change approach Appreciative Inquiry, which views the participant as an expert in their own environments as well as the ideal method for intervention design, is a strong example of soft systems change methodologies.

Each of the implemented changes (as shown in **Table 29**) fit the SSMC approach, with the emphasis on employee interaction with organisational systems, although without any pre-existing expectations as to the type of impact these changes should have. The table shows that many of the implemented changes impact upon the way that individuals and management interact and communicate, a clear emphasis on the subjective approach inherent within an SSMC. While a Hard Systems approach may have sought to quantify the amount of impact that interventions may have had on both the individuals and overall organisation, an SSM approach implements the intervention without having to objectively measure the outcomes.

To summarise, the use of an SSMC approach to implementing the interventions within the organisation have been successful. Use of the human-facing approach within SSMC, as well as a lack of emphasis on pre-defined outcomes, has meant that the subjectivity within SSMC has been a fruitful approach to take. To evidence this a large number of organisational interventions have been implemented, although the actual impact of these implementations will remain unknown.

3e) Phase 1 vs. Phase 5

As described through **Section 5** of **Chapter VII** there are clear differences between the outcomes from Survey 1 and Survey 2, as was expected due to the 12 month time period between the two phases of the research. However, the most important difference to investigate is shown in **Table 22**, which depicts the differences between Survey 1 and 2 on each of the factors on the MSIT and MBI-GS.

The table shows that, despite differences between the mean rank scoring on each of the 7 assessed factors in the MSIT, only three factors changed significantly over the 12 month period. First of all Demands scored on average higher in Survey 2 than they did in Survey 1. Due to the negative nature of the questioning for the Demands factor this shows that the amount of Demands faced by employees has increased over the 12 month period. This may be partially explained by the large number of employees that have left the organisation through the period of the study without a similar reduction in the number of work tasks asked of the workforce. A similar explanation could also be given for the decrease in the amount of Peer Support through the period of the study. Peer Support outcomes were much greater in Survey 1 than Survey 2, again with a significant difference between the two. Having fewer peers to provide the support and help through the organisation would obviously reduce the amount of peer support available. The third and final statistically significant MSIT variable difference between Survey 1 and Survey 2 related to 'Role'. Individuals clearly had a better understanding of their Role in Survey 1 over Survey 2, and the blurring of individual roles may again be explained by the reduced number of employees within Service 6 who are asked to do more work to cover for those who had previously left the organisation.

With respect to the Maslach Burnout Inventory-General Survey results, significant differences were found between each of the three inherent factors. The higher scoring on both of Exhaustion and Cynicism in Survey 2 means that these participants had much increased levels of both of these, a clearly negative difference between the two. Despite this a significantly higher score on Professional Efficacy was gained in Survey 2, i.e. social and non-social accomplishments at work, is a hugely positive outcome. Individuals therefore felt that accomplishments at work have improved over the past 12 months.

To summarise, the majority of the differences illustrated between outcomes in Surveys 1 and 2 have been negative, indicating that the number of psychosocial hazards have increased over the period between the two surveys. Similarly participants have described themselves as more exhausted and cynical toward their work, although accomplishments at work also improved over the time period. Whether these differences can be attributed to changes in personnel numbers over time is unclear, and would need rather more investigation to clearly make these claims.

4) Conceptual Framework Review

Figure 21 presents a re-visiting of the conceptual framework, as explored originally in **Chapter V, Section 1**. The framework represents the previous theories, models and typologies which were represented throughout the presented research as well as the interrelations between each of these aspects. The stress literature is large with theorists and researchers proposing different approaches to stress and stress-related outcomes. However, the presented research is clearly located within two of these: the stimulus approach to organisational stress and the transactional approach. The stimulus approach to organisational stress (see **Chapter II, Section 1a.2**) argues

that individual employees can withstand only a certain amount of stress before resources are depleted and the stress leads to a strain reaction. The approach is taken into account within the presented research in that both daily hassles and major life events are assessed in combination with employee burnout. Indeed the presented research assessed how organisational stress impacts upon the experience of burnout using both qualitative and quantitative methods, with results affirming the notion that the experience of both chronic daily hassles and major life events can impact upon burnout. The quantitative outcomes clearly show that psychosocial stressors as measured by the MSIT (which takes into account the major life event approach) impact strongly upon Burnout as a stress-related outcome. Equally the qualitative results indicate that individuals were experiencing psychosocial stressors in the form of daily hassles, although without a related assessment of stress-related outcomes it is difficult to attribute these hassles to a stress-related outcome. However, it must be noted that quantification of the stimulus approach is difficult due to the subjectivity involved in any psychosocial stress self-report measures. Therefore it is difficult to assess how much of a particular stressor, or what combination of stressors, is needed for an individual's resources to become depleted and a strain reaction recorded.

The transactional approach however (**Chapter II, Section 1a.3**) describes the experience of stress as the interaction between an individual and his/her environment which is mediated by the coping mechanisms available for the individual employee to 'deal with' the stressor. It is clear that the presented research cannot take into account the whole of the transactional approach – the work in no way directly assesses individual emotion-focussed coping mechanisms described within the model. Neither does the presented research attempt to assess or describe the appraisal categories assumed within the model. Bond and Bunce (2000) however discuss problem-focussed approaches as primary organisational change interventions which, in a manner similar to the presented

research, empower individuals to identify and act upon workplace stressors. Problem-focussed approaches therefore, in which the individual takes action to change a particular situation, are addressed in the presented research by identifying an issue and turning it into something more positive. Indeed once the action plans had been accepted by management and implemented into the organisation individual respondents were taking steps to address the issues that they faced.

Also as is described in the model individual response variability to stress reactions is clearly taken into account. Through the qualitative AI phases, and in particular the daily diaries and individual semi-structured interviews in which individual opinions and discussions were captured, this variability was clear. For example, areas working well were as diverse as peer support and successful working in the log phase, with semi-structured interviews adding further factors. This shows that although the whole of the transactional model cannot have been assessed in the presented study, certain aspects are still identifiable.

The stimulus approach has proven to be extremely well-utilised with respect to workplace stress. Indeed, the Job Demands-Control-Support model of occupational stress is based upon a stimulus approach (McClenahan, Giles & Mallett, 2007), where it is argued that the chronic individual experience of high demands in combination with low levels of autonomy (Control) and poor Peer Support can lead to stress-related outcomes, such as burnout. The JDCS was assessed in the work through the use of both the qualitative and quantitative aspects of the work. While Demands and Support (in the form of Managerial Support) were found to be stressors that individuals experienced in the workplace, Relationships (part of the 'social support' aspect of the JDCS) was found to buffer employee experience of stress. Despite this, neither of the methods used found that Control played an important part in the

experience of stress for employees, which is in contrast to much of the research literature presented in **Chapter II, Section 1b.1**.

However, it has been proposed that the JDCS cannot be utilised as a catch-all model for the evaluation of workplace stress (Theorell, 1996). This argument is supported from the outcomes of the presented study, for example where Study 1 stepwise linear regression outcomes shows that Change significantly impacts upon Cynicism, and similarly where Role impacts upon Professional Efficacy. These outcomes are factors which have the potential to be ignored in JDCS-based occupational research, and so any study which seeks solely to incorporate Demands, Control and Support alone may be limited in their findings and in the explanation to the causes of stress.

There are two predominant arguments as to how stressors can impact upon individuals: the daily hassle approach and the major life event approach. The major life event approach is the most often researched approach to occupational stress – indeed, the JDCS is an example of such an approach. Chronic exposure to these major life events can overcome individual defences and resources to lead to stress-related outcomes (e.g. Clint, Barry and Alexia, 2008; Edwards, 2008). The Management Standards Indicator Tool, a 35-item self-report measure of psychosocial workplace hazards, assesses the major life events approach in the workplace. Indeed, multivariate stepwise linear regression analysis of the MSIT alongside the MBI-GS indicates that some of the major life events assessed within the survey play a part in the experience of burnout as a stress-related outcome. The major life event approach therefore played a part in gaining a strong understanding of the type of major life event stressor implicit within the organisation, as well as providing an organisational understanding when combined with the results of the daily hassle approaches.

The daily hassle approach was assessed using the AI approach, and therefore the organisational interventions designed were based on the hassle outcomes. Daily hassles were the main focus of the AI approach because of the feasibility of daily hassles in the development of organisational interventions. Indeed the approach proved to be both provocative and fruitful. The sheer number of responses to the AI phases indicated that the approach provided a strong attraction to employees, and individual responses provided shows a great strength of feeling toward these daily hassles. Indeed, a mixing of the daily hassle and major life event played a strong part in the development of the local stress theory, whereas the AI approach led to the development and implementation of organisational change interventions.

Burnout has been shown to be a potentially devastating outcome of chronic workplace stress (Collings & Murray, 1996). Within the presented study 10% of respondents in the first survey phase, and by extrapolation approximately 7% of all of the individuals within the participating organisation were suffering from high levels of burnout at the time of answering the survey first time around. Similarly, the MSIT found that a number of workplace hazards were strongly associated with each of the three separate aspects of burnout, thus indicating that stress had indeed played a part in the experience of burnout for the population as a whole.

The secondary research objective in the presented thesis was to develop interventions for the improvement of organisational stress. Soft systems approaches (**Chapter IV, Section 2a**) describe an organisational change process which is messy, and lacks any pre-defined outcome goals. This soft systems approach was the most useful for the presented study – the participating organisation has been going through a dynamic and chaotic period of change as evidenced through the Service 6 demographic changes in the 12 months between surveys 1 and 2 (see **Chapter VII, Section 3a.1**). Therefore measuring pre-defined goals and outcomes from the study would be

impractical because there are too many factors to take into account in order to utilise thorough pre-defined goals and outcomes. A soft systems approach also takes into account the messy nature of a change process which would otherwise be difficult in a hard systems approach.

The utilisation of a soft systems approach was found to be useful. The study reflects the human side of an organisation, an important aspect of a soft systems approach, in utilising a change methodology which utilises the discourse of individuals in order to effect a change. The presented research examined employees' positive experiences, to improve upon future employee experiences at work, and therefore improve on the systems where necessary. This shows that the presented 'daily hassle' approach fits the soft systems approach to organisational stress, rather than the hard systems approach. Similarly, the variability associated with the stimulus approach to stress makes explicit measurement a difficulty.

Primary stress management techniques are those which are aimed at improving the organisation, rather than individual coping, in order to improve upon the experience of stress (**Chapter III, Section 1e**). It is widely argued that primary changes are both more effective and longer lasting than either secondary or tertiary approaches but are most under-utilised. As critically discussed previously (see **Section 3d** and **Table 29**) each of the interventions that have been implemented into the organisation are primary-focussed, aimed at improving on the source of stress rather than individual improvement. However, in order to be able to adequately assess the wider organisational impact of the interventions, an evaluative stage would need to be added approximately one year post-implementation. Time did not allow this to happen in the presented study, and so it would be impossible to argue that the primary changes implemented have had an impactful outcome within Service 6 at the time of writing.

Within the conceptual framework it was assumed that an understanding of the type of organisation the presented research took place in would be important. Handy's conceptualisation of organisational cultures (**Chapter IV, section 1ab**) which has been extrapolated to an organisational typology, presents one such understanding of the various types of organisation. It is clear from *Figure 7* that the participating organisation fits the profile of the Role Culture, in which clear layers of management and staff are visible within the organisation. This understanding of organisational typology was important. For example, Handy's conceptualisation (Brown, 1998) made it clear that a number of layers of management gatekeepers would need to be worked with before access to staff was gained for the bottom-up process. Therefore throughout the presented research it was necessary to work with management, creating engagement in the process, in order to ensure successful outcomes with the work.

Handy's typology also claims that the organisation would struggle to work with change which was attempted to be implemented too quickly (Brown, 1998). Therefore an understanding as to the method of information and data dissemination to potential participants prior to data collection was taken into consideration. As such it was decided early on in the AI process that giving too much information about the proposed process could put off employees from taking part, possibly confusing individuals and having them assume that too much was being asked of them (indeed this is reflected in *Appendix 14*, which reflects upon an attempt to use an Action Research methodology as the original change methodology). Information was therefore outsourced slowly and phase-by-phase to individuals, rather than giving too much information at the start of the process.

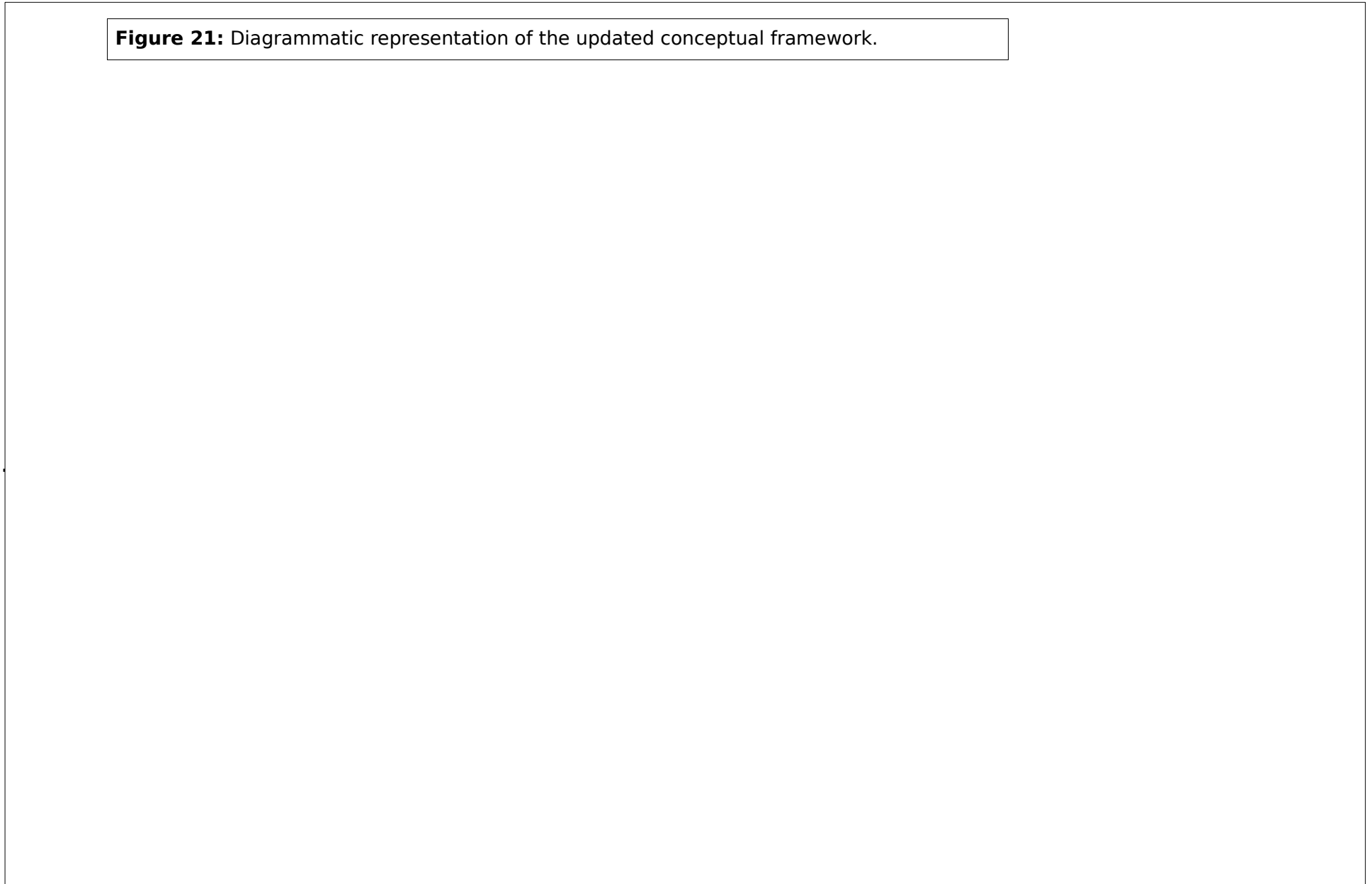
Modern organisations exist within a dynamic environment in which changes may occur at a rapid pace. Learning organisations are those which are best at responding to, and learning from, both success and challenges.

It is also assumed that the learning organisation is the direct opposite of a traditional hierarchical organisation (Lampel, 1998), and thus in direct contrast to what Charles Handy described as the Role culture organisation. Despite the apparent advantages of working within a learning organisation (see **Chapter IV, Section 1b**), it is clear that the presented organisation cannot be called a learning organisation in the traditional sense. It is a hierarchical organisation consisting of the 'Role' culture as described by Handy. According to Lampel (1998) an organisation with a hierarchical structure could never be assumed to be a learning organisation and therefore unable to be categorised as a learning organisation. However, the PAO does have some features of learning organisations. This can be emphasised by the simple fact that external researchers were invited in to work with employees to find solutions and design interventions using a bottom-up, participatory approach. Similarly having these interventions implemented without tempering the result shows willingness to work as a learning organisation in some ways.

To summarise, the conceptual framework as originally depicted in *Figure 6* and critically discussed in **Chapter V Section 1** provided a strong rationale for the use of a mixed methodology. The stimulus approach (and consequently the Job Demands-Control-Support model) to stress, for example, advocate the use of a quantitative methodology to assess stress and stress-related outcomes. Differentially however the subjective nature of the transactional approach (and the assessment of daily hassles) advocates the use of qualitative methodology. Finally within soft systems approaches to organisational change mixed methods approaches are useful to assess the human factor component of change. It can therefore be seen that the majority of the conceptual framework as originally conceptualised in **Chapter V** (*Figure 6*) have been influencing factors on the

presented research, although with some aspects not fully implemented. An updated conceptual framework, taking into account only the important theories and models as depicted in *Figure 6*, is therefore represented in *Figure 21*.

Figure 21: Diagrammatic representation of the updated conceptual framework.



5) Recommendations & Future Research

The most important outcome of the presented thesis has been the success of the methodology used. In particular using mixed methods to assess daily hassles and develop/implement organisational interventions was found to be a powerful method of working. As such applying each of these elements to wider research projects, and in particular working within the whole of an organisation to implement the methodologies used, is a strong area for future research. Also it is recommended that the mainstream academic understanding of the AI cycle is updated to include the 5th 'D', Deliberate.

The potential outcomes associated with daily hassles both within and outside of the workplace requires greater investigation. Therefore it is necessary that wider research is conducted on the impacts of daily hassles outside of the workplace. For example, looking at the impact of daily hassles on known antecedents of major life events such as work-life balance, exercise intentions and undertaking, smoking and alcohol drinking.

An extremely interesting outcome of the presented study regards employees turning up for work (and taking the time to complete the survey) despite having high levels of Exhaustion and Cynicism, and low levels of Professional Efficacy and hence suffering from defined 'burnout'. Indeed upon selecting particular respondent cases it was discovered that approximately 10% of respondents in Survey 1 (13 employees, 7% of all Service 6 employees) were suffering from burnout, as defined by Schaufeli et al. (1996). With these individuals unable to fully participate and fulfil their work duties due to a Cynical attitude and feeling of emotional and physical Exhaustion, a further investigation as to the impact of Burnout on work performance (and in particular presenteeism) is required.

The Job Demands-Control-Support model is probably the most influential model of stress in the workplace of the last 2-3 decades. Indeed much literature has been produced on the subject and wide-ranging studies have found strong associations between lack of Control and negative health outcomes. Despite this, the presented study found that Control had relatively little impact on the three factors implicit within Burnout. Indeed in Survey 1 (see **Chapter VII, Sections 1 and 2**) Control had a significant association with Exhaustion alone, although the impact of Control was relatively minor. Similarly Control was found to be significantly associated with Professional Efficacy although with no firmer impact than any of the other associated factors. Finally, Control was found to play no significant part in Cynicism outcomes. It is therefore suggested that the impact that Control has on the implicit burnout factors is investigated in more depth. Similarly a wide-ranging investigation of the impact of Control on stress-related outcomes should be conducted in order to ascertain the strength of impact Control has on stress-related outcomes when compared to the other factors implicit within the MSIT.

It is presumed that daily hassles have the potential to have as much impact on the experience of stress as major life events (McIntyre, Horn & Matsuo, 2008). However the long-term nature of daily hassles, and whether or not they remain stable over time or are dynamic and changeable, and whether daily hassles have the potential to develop into major life events, is vastly under reported. Therefore a longitudinal study into the durability and nature of daily hassles is required among an occupational sample. Similarly, a long-term investigation as to the associated antecedents of chronic daily hassles is required – do individuals who encounter chronic daily hassles exhibit more stress-related outcomes than those who encounter fewer, or the proportionate impact of daily hassles in comparison to major life events.

As emphasised earlier in this chapter, the presented study was unable to satisfactorily account for the emotion-focussed approaches to stress that are included as a key aspect of the transactional theory. Indeed the work does not attempt to focus on secondary and tertiary approaches to stress management, within which emotion-focussed approaches would become part. As such a more thorough investigation of the use of problem- and emotion-focussed coping mechanisms alongside primary and secondary organisational change approaches are necessary in order to more fully assess the effectiveness and usefulness of these approaches, possibly with an investigation of the strength of impact of each of these areas against one another.

A final area which requires much further investigation regards the impact of Appreciative Inquiry versus traditional 'deficit-based' models. While AI has recently been shown to be an effective change tool in a small variety of change projects, Participatory Action Research (a closely-related change methodology which is comes under the umbrella of a 'deficit-based' model) has been shown to be effective within a range of areas (e.g. in education, Avgitidou, 2009, as well as the workplace, Elsey & Lathlean, 2006). However it is not known whether either positive or deficit-based methodologies are consistently more impactful than each other in particular settings, or under what circumstances which methodology is most powerful. Therefore a thorough evaluative study into which methodology is most appropriate under particular circumstances would greatly enhance understanding of the AI process and methodology.

Chapter XI:

Conclusions

Chapter XI: Conclusions

The final presented chapter of this thesis is to follow on from **Chapter X: Discussions**, in which the results culminating from the presented thesis were discussed, including how these results compare to previous studies. The presented chapter will explore whether the methodologies used, and the outcomes gained, were successful in use or not. Also a demonstration as to how the work has added to the knowledge of the literature is given as well as the original contribution required of any PhD process. Lastly a reflection on the three-year doctoral research process is given.

1) A Successful Methodology?

As critically discussed throughout **Chapter VI (Methodology)** the presented research took a mixed-methods, pragmatic approach within the work, which proved successful and useful. The work began and ended with a quantitative survey, with the first survey adding the objectivity which is associated with positivist approaches to knowledge about the organisation. The AI approach comprised three distinct and iterative phases, beginning with a daily log phase which was designed to be completed over a very short period of time either online or by hard copy at the end of a work day. The schedule of the next phase (individual semi-structured interviewing), a number of one-on-one semi-structured interviews, was designed with the results of the survey and logs in mind. Also the use of a semi-structured interview approach allowed the conversation between researcher and participant to flow and deviate away from the questions inherent in the interview agenda. The final AI phase was made up of two focus groups, in which the focal point was the development of an action plan for change. The focus group schedule was therefore based on the results of each of the previous stages, with action plans implemented by

organisational management thereafter. Finally a re-administration of the survey was submitted, with results providing an increased understanding of the organisational context over the 12 months the work took place.

The quantitative data collection phases consisted of employees within the participating department of the organisation completing the Management Standards Indicator Tool and Maslach Burnout Inventory - General Survey. Descriptive results from Survey 1 showed that 5 of the areas measured by the MSIT were requiring improvement, and further results showing that those individual respondents who scored scoring on the MBI-GS scored worse in each of MSIT factors. This indicates that, in agreement with the general consensus of the majority of previous research, burnout can be strongly influenced by chronic workplace stress and that the MBI-GS is a good measure of this phenomena. The MSIT is clearly therefore, as is argued by authors such as Edwards et al. (2008), to be a useful psychosocial stress risk assessment tool. Lastly regression analysis results showed that while organisational Demands, Control and Support do play some part in the experience of Burnout in the population studied as described by the Job Demands-Control-Support model of workplace stress, the model is also overly simplistic in that it does not assess workplace stress to a full enough extent.

This quantitative aspect of the work was therefore fruitful and successful. As well as adding to the existing literature on the MSIT, MBI-GS and psychosocial stressors (see Appendix 12), Survey 1 provided a strong initial understanding of the psychosocial stressors facing individuals. Indeed the results formed a strong part of the 'Local Stress Theory' as depicted in *Figure 20*. Lastly the quantitative methodology was fruitful for the organisation, as well as in presenting the research outcomes. Differential results from surveys 1 and 2 provide evidence as to the way in which the organisation has changed over a 12 month period, from the number of employees reducing dramatically to the potential impact that these reductions could be having. Finally the

quantitative results show that some of the psychosocial hazards that individuals face have increased in intensity over time.

As well as having strong research outcomes from the quantitative phase of the research design (see *Appendix 12* for a journal article currently in press awaiting publication based on these outcomes), it is also proposed that each of the qualitative phases in work gave not only an understanding of the area of the workplace requiring improvement, but also led to the design and implementation of organisational improvement interventions. Indeed the qualitative aspect has been so well received that, upon discussions with the editor of the *International Journal of Stress Management*, it was decided that the qualitative AI aspects would form an ideal journal publication.

One issue in which the presented research could be faulted upon is inherent within the utilisation of an AI approach. It is generally agreed that in order to understand what requires improvement within an organisation it is necessary to have an idea as to what is afflicting employees, and in turn the organisation. In other words it is necessary to understand the issues facing people before the AI methodology is started. It is recognised that this is a potential limitation of AI research - it is difficult to understand the issues facing employees if they are never sought. However practitioners have agreed that it is possible to include a 'diagnostic' aspect in such a research methodology, an aspect which should be undertaken prior to the commencement of the AI approach. Whether the quantitative approach taken in the presented research in order to determine the areas requiring improvement was adequate for this task however is questionable. As shown in **Chapter VIII Part 4, Section 9b** there were a number of qualitative results which were not mirrored in the quantitative outcomes, highlighting a limitation to the

use of quantitative approaches in the diagnosis of organisational issues, but also led to questions over the assumptions of mixed methods within this context.

A second approach which could be described as not having been successful is in the evaluative implementation of the 5th 'D'. One of the biggest reasons for the poor success rate of organisational change methodologies in general is the lack of an evaluative stage (Richer et al., 2010). In order to overcome this the presented thesis suggested the implementation of a 5th 'D'. Despite the suggestion, time and resource constraints meant that this could not be incorporated in the research. Therefore it is still unclear as to the impact that the present research methodology and outcomes have had on employee experience of psychosocial daily hassles. However, the methods used to gain the presented outcomes could certainly be evaluated as successful - as previously described they have been fully implemented into the organisation at the time of writing. Therefore, despite it having proved not possible to explicitly evaluate the results of the work, the methods taken to get them have been fruitful and successful.

2) Adds to Knowledge & Original Contribution

Table 31 provides a brief description as to how the presented project adds knowledge to existing literature, as well as an original contribution to knowledge. According to Bentley (2006), one of the most useful things that an academic can do is increase the sum of human knowledge. Whereas non-original aspects of a research process can be forgotten within a few months, new knowledge can be taken forward in future research. **Table 31** and the following prose therefore present the originality provided by the current research, as well as how the research process and outcomes have added to the sum of our knowledge.

Table 31: How the project adds knowledge to the existing literature as well as originality.

Originality or New Knowledge?		Concept
1.	Originality	No AI research conducted previously within the participating organisation.
2.	Originality	The process is the first of its kind to be developed to be henceforth implemented throughout an organisation following a smaller-scale research project.
3.	Originality	The two survey tools have never been utilised together to assess potential workplace hazards as well as stress-related outcomes.
4.	New Knowledge	Assessment of survey tools as appropriate for simultaneous use (see related journal article, <i>Appendix 12</i>).
5.	Originality	First to add the 5 th 'D' to the cycle, proposed to evaluate the effectiveness of the process, before beginning a new AI cycle as necessary.
6.	New Knowledge	Adds the 5 th 'D' to knowledge.
7.	Originality	AI has rarely been utilised within a public-sector borough council organisation.
8.	Originality	AI has rarely, if ever before been used to impact upon stress within the workplace.
9.	New Knowledge	Adds to the growing AI literature with respect to organisational change
10.	Originality	The results which are deemed by management to be applicable to the organisation as a whole will be implemented at a time suitable to the participating organisation.

The first way in which this research is original is that no AI research project has been conducted within the participating organisation. The work therefore is the first, and only, project which utilises the AI principles of positive discourse and understanding within the organisation. Similarly, while the project was undertaken within one of six 'Service' areas which comprise the organisation, it is understood that following completion of the

research the relevant systematic findings, and AI-linked methodology, can be applied to the rest of the organisation. Therefore where appropriate (as defined by management) the action plans described in **Chapter VIII Part 3 (Focus Groups)** shall be applied to the rest of the organisation, and the methods utilised will become part of the organisation's wider working methodologies. Furthermore, an original contribution can be gained by assessing the suitability of utilising the Management Standards Indicator Tool and Maslach Burnout Inventory-General Survey concurrently as measures of psychosocial workplace stress and a potential outcome of chronic workplace stress. This is evidenced from *Appendix 12*, a peer-reviewed journal article to be published in 'Occupational Medicine' written by the current author. To date the two tools had not been reported as being used together, and while the MSIT has been utilised alongside other measures of psychological ill-health described as resulting from stress, the presented project is that first to look at the MSIT alongside the MBI-GS.

Until the present thesis the predominant view of the AI cycle of change has consisted of 4 'D's: Discover, Dream, Design and Destiny. The presented research, however, proposes a 5th 'D' to the cycle: Deliberate. Research has indicated that while many organisational change processes are implemented and changes made, often neither the process nor the results are evaluated to assess either effectiveness or efficiency (Richer et al., 2010), or how the process can be improved in order to begin a new cycle of change. This proposed 5th part of the process is designed to evaluate the AI process, and whether it can be improved upon in order to deliver stronger and longer-lasting outcomes. This theoretically-based update therefore is original (it has not been utilised previously) and adds new knowledge, although actual implementation was not possible in the current research.

The next example of originality from the presented thesis relates to the use of AI as a method of change within a public-sector borough council organisation, as well as the use of AI as a method of improvement upon the

experience of stress in the workplace. A review of the AI literature reveals that while the use of AI is most widespread in community and educational settings, it has been used much less within borough council organisations thus revealing a unique contribution. One of the few such examples was research conducted by McAllister and Luckcock (2009), who used AI in a public-sector organisation for the improvement of customer service within a public sector borough council organisation. Similarly the results of an extensive literature search found no other such methodologies been used with respect to improvement of employee health and well-being. Therefore with the presented work aiming to improve upon the experience of workplace stress within a borough council originality is provided.

Furthermore research has revealed that while primary organisational change (based at tackling the source of the workplace stress problem) strategies are least-widely utilised when compared to secondary and tertiary approaches, they have the potential to have the strongest and longest-lasting impact (Jordan et al., 2003; Randall, Griffiths & Cox, 2005). This project therefore utilises primary change initiatives to impact upon stress thus illustrating both originality and new knowledge are demonstrated by working in this manner.

3) Reflections

The initial motivations for undertaking this research came from MSc Occupational Psychology dissertation research. The dissertation looked at what acute stressors emergency services' personnel faced in the line of duty, as well as the coping mechanisms utilised in these stressful situations. Organisational stress has therefore always been an interest, and something to be built on at a higher level of research. Therefore a PhD in organisational stress, and in particular in the improvement of the experience of stress, was the natural progression following MSc

dissertation completion. Having had a proposal accepted to study at Anglia Ruskin University, PhD supervisor Dr Andrew McVicar built upon his extensive contacts with individuals in the participating organisation in order to work with the participating organisation within the area.

Upon reflecting on the entire research process it is apparent that there are a number of aspects of this work which have both facilitated and inhibited the process. To begin with, it is worth noting that the PhD process began with an attempt at a change process using a Participatory Action Research (AR) methodology. However, upon holding group discussions with prospective participants it was generally accepted by all that this would not work as a methodology. *Appendix 14* details the evaluative feedback gathered from prospective participants on the original AR process. It is clear from these responses that the proposed project failed due to three main reasons.

Time commitments were a first issue for individuals – the AR project asked for up to 2 hours of employees' time per month over a 6 month period, with this time off from work agreed with management prior to the proposal being put forward to employees. However the feedback from employees was that this would be too much of a time commitment, and despite management agreeing to the time off being taken the employees would still be expected to make up for any work lost during the time taken out.

Secondly Bruckman (2008) has shown that one of the methods by which resistance to organisational change can be improved upon is by ensuring small goals are reached throughout the change process, and employees are not over-loaded with information. At the beginning of the AR process the researchers worked with line management in order to convey the proposed project to employees, describing the whole of the process from the start. However respondents suggested that too much information was given all at once, and that it did not appear as though the project would be successful because of this. Therefore because small gains to motivate employees

would not be possible, potential participants may have been mistrustful due to the information coming from management rather than an external independent body, and far too much information was given at the beginning of the process.

Finally the financial climate was a clear potential negative of taking part in the original AR study. First of all it was believed that an applied piece of research which assess 'daily hassles' would be unlikely to be a dent on the more acute major event stressors which may go along with the financial issues of working in a public-sector organisation. Similarly the AR process was not completely anonymous in nature (although confidentiality was assured). Therefore respondents felt that should they take part they may be putting their jobs at risk by speaking out (in a negative manner as would be the case with much of the AR process, which looks at the problems rather than positives within an organisation) against organisational and management systems.

Lessons were learnt therefore from each of the reflections of the AR process. When describing the new proposal to participants, the explanations were made step-by-step rather than all at once. For example, the survey was presented and distributed to potential participants before the participants were introduced to the daily log phase. Also all information and invitations to take part were made by the lead researcher, rather than any management within the organisation. The whole process was also designed so that less time was required from participants. For example only two questionnaires were included as part of the overall survey rather than three, the daily log phase was designed to take just a few minutes at the end of each work day, the semi-structured interviews were designed to take on average 30 minutes, and each individual was invited to take part in just one focus group (rather than one focus group per month as in the AR process), both of which were limited to just one and a half hours long each. Also the whole of the process (as far as was possible) was made completely

anonymous to remove any potential fears of being penalised for taking part. Lastly the use of a positively-based methodology was found to have a good impact on participation and outcomes – providing constructive (positive) information meant that staff were not ‘venting anger’, but rather offering methods of improvement for the organisation. Therefore there would be no fear of reprisal for taking part, and it also allowed full employee engagement in the AI process without being too time- or asset-consuming.

Upon reading through a number of research ‘diaries’ kept throughout the reflective research process, it is clear that one further mechanism for making sure of the success of the project were the ‘champions’ within the organisation. These champions refer to official and unofficial management/leaders within the organisation that have the ability to ensure projects move at sufficient pace. For example, the HR Business Partner of the participating Service was able to introduce the researcher to key employees, as well as sending out mail and emails to all staff on behalf of the research. Similarly the individual could book meeting rooms and provide invitations to key organisational meetings. Also one of the HR employees was key in the process, providing important information throughout the process. Individuals such as these are key to the movement of a project, and should always be sought at the beginning of the change process. Just as importantly however, champions lower down in the organisation that can act as advocates in the research, encouraging participation among peers.

According to the Management Standards Indicator Tool Analysis Tool focus groups should be used in order to confirm the results of the MSIT and further explore the ‘issues of concern’. However, it is proposed that this is an insufficient method of analysis – the MSIT is too restrictive to fully ascertain the areas of the workplace which require improvement. Focus groups alone have been shown to be restrictive for participants (Byers et al., 2002), for example when management and employees are mixed within one sample. Therefore the AI methodologies

utilised are more robust and result in greater and richer detail than just focus groups because of the use of non-directive daily diaries and semi-structured interviews, as well as the use of focus groups. Lastly while it can also be said that some of the outcomes of the MSIT were reflected in the qualitative aspects, not all were. Indeed, as *Appendix 6* shows five out of seven areas were found to require strong improvements from Survey 1, whereas these were not areas of concern when given the chance throughout the qualitative phases. Therefore it is correct that a mixed methods approach which takes into account the subjective experiences of individuals was undertaken.

Finally, it is worth reflecting upon issues encountered with respect to enhancing employee and management engagement with the research process. Indeed despite the perceived complete buy-in of management at the head of the organisation and an apparent dedication toward the success of the work, initial contacts with potential participants were unsuccessful (see *Appendix 14* for comments on the original methodological proposals). For approximately 12 months therefore sufficient engagement in the process was not forthcoming from potential participants, prompting a change in methodology. The AI methodology was subsequently presented to top and middle level management, again with a good level of apparent buy-in to the process gained. Crucially however, certain members of the Human Resources team within the organisation who could help get things moving - for instance talking to management, send group employee emails on behalf of the researcher, facilitate the arrangement of room booking and such - were also canvassed and strongly approved of the process. As such these 'insiders' (e.g. Kidd, 2009) allowed the work to move forward at an appropriate rate, and also helped to create crucial engagement in the process. Therefore the utilisation of the new methodology combined with insiders helping to drive the process forward all helped to increase engagement and therefore the number of participants that took part in the study.

4) Final Conclusions

To conclude and finally sum up the presented research in brief, this thesis has presented considerable theoretical (in the form of the updated AI cycle) and practice-based additions to knowledge. The use of an equal-weight mixed research methodology in the assessment and improvement of workplace daily hassles has been feasible, attainable, and successful and has clear potential for future organisational improvements. For future research and practical use it is suggested that the 5-D AI cycle is implemented and henceforth AI projects will benefit from evaluative processes, the lack of which are often to the detriment of many organisational change interventions.

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List of Appendices

Appendix No.	Page No.	Appendix Name					
1.	Abbreviated Terms	.	.	.	278
2.	Pilot Study Results Table	.	.	.	279
3.	Hard copy survey tools	.	.	.	280
4.	Email invitation to 1 st survey	.	.	.	282
5.	Hard copy invitation to 1 st survey	.	.	.	284
6.	Survey 1 MSIT analysis tool outcomes	.	.	.	285
7.	Interview schedule	.	.	.	286
8.	Interview participant information sheet	.	.	.	288
9.	Interview consent form	.	.	.	290
10.	Focus group schedule	.	.	.	291
11.	Focus group ground rules	.	.	.	293
12.	Survey tool journal article	.	.	.	294
13.	Survey 2 MSIT analysis tool outcomes	.	.	.	306
14.	Responses to AR methodology proposal	.	.	.	307

Appendix 1: List of Abbreviations

AI - Appreciative Inquiry	AR - Action Research
BP - Blood Pressure	CHD - Coronary Heart Disease
CVD - Cardiovascular Disease	CY - Cynicism
EAP - Employee Assistance Program	ERI - Effort-Reward Imbalance
EX - Exhaustion	FSR - Fundamental Service Review
GAS - General Adaptation Syndrome	GHQ - General Health Questionnaire
HSM - Hard System Methodologies	HSE - Health and Safety Executive
IPA - Interpretive Phenomenological	HSMC - Hard Systems Methods of
Analysis	Change
JDCS - Job Demands Control Support	JDC - Job Demands-Control
MBI-ES - Maslach Burnout Inventory	LFS - Labour Force Survey
- Educator's Survey	
MBI-HSS - Maslach Burnout	MBI - Maslach Burnout Inventory
Inventory - Human Services Survey	
OD - Organisational Development	MBI-GS - Maslach Burnout Inventory
	- General Scale
PAO - Participating Organisation	MS - Management Standards
PWC - Psychosocial Working	MSIT - Management Standards
Conditions	Indicator Tool
SSM - Soft Systems Methodologies	PAR - Participatory Action Research
PE - Professional Efficacy	SMI - Stress Management
	Interventions
SSMC - Soft Systems Methods of	
Change	

Appendix 2: Pilot Study Results Table

Pilot Study 1 Participant Comments								
Out of 22 respondents, 9 commented. Some of which are:	Qualitative Results - Comments					Comment Analyses		
	Is not a clear link between health questions and work.					These comments make it clear that while the majority of those who made comments found the questionnaires easy to follow, the majority of problems were with the GHQ, and particularly because it is too life-rather than work-related.		
	The GHQ is life, rather than work, related.							
	Easy to complete, no difficulty understanding the questions.							
Quantitative Results – Pilot Study 1, N=22 Cronbach’s Alpha results:								
<u>MSIT Overall</u>	<u>Control</u>	<u>Demands</u>	<u>M. Support</u>	<u>P. Support</u>	<u>Relationships</u>	<u>Role</u>	<u>Change</u>	<u>GHQ-12</u>
.64	.87	.89	.65	.79	.71	.78	.55	.87
Pilot Study 2 Participant Comments								
Out of 22 respondents, 7 commented. Some of which are:	Qualitative Results - Comments					Comment Analyses		
	It looks very professional but I don’t think the frequency response set on the MindGarden questionnaire works well.					Comments generally positive about this version as opposed to that distributed in the first pilot. Main issue seems to be the use of Likert scales, but the use of these have been heavily validated over time.		
	Much better than the previous version. Seems to be work-orientated, whereas the last one could have been anything.							
	The Likert scales seem to be a problem – sometimes they make it difficult to assess what they are actually measuring.							
Quantitative Results – Pilot Study 2, N=17								
<u>MSIT Overall</u>	<u>Control</u>	<u>Demand s</u>	<u>M. Support</u>	<u>P. Support</u>	<u>Relationships</u>	<u>Role</u>	<u>Change</u>	
.92	.90	.85	.87	.88	.70	.76	.87	
<u>MBI-GS (Overall)</u>		<u>Exhaustion (EX)</u>		<u>Cynicism (CY)</u>		<u>Personal Efficacy (PE)</u>		
.90		.93		.95		.89		

Appendix 3: Hard Copy Survey Tools

Wellbeing at Work Survey

Copyright HSE, UK

	Never	Seldom	Sometimes	Often	Always
1. I am clear what is expected of me at work [] []	[]	[]	[]		
2. I can decide when to take a break [] []	[]	[]	[]		
3. Different groups at work demand things from me that are hard to combine [] []	[]	[]	[]	[]	[]
4. I know how to go about getting my job done [] []	[]	[]	[]	[]	[]
5. I am subject to personal harassment in the form of unkind words or behaviour [] []	[]	[]	[]	[]	[]
6. I have unachievable deadlines [] []	[]	[]	[]	[]	[]
7. If work gets difficult, my colleagues will help me [] []	[]	[]	[]	[]	
8. I am given supportive feedback on the work I am given [] []	[]	[]	[]	[]	
9. I have to work very intensely [] []	[]	[]	[]	[]	[]
10. I have a say in my own work speed [] []	[]	[]	[]	[]	
11. I am clear what my duties and responsibilities are [] []	[]	[]	[]	[]	
12. I have to neglect some tasks because I have too much to do [] []	[]	[]	[]	[]	
13. I am clear about the goals and objectives for my department [] []	[]	[]	[]	[]	
14. There is friction of anger between colleagues [] []	[]	[]	[]	[]	[]
15. I have a choice in deciding how I do my work [] []	[]	[]	[]	[]	[]
16. I am unable to take sufficient breaks [] []	[]	[]	[]	[]	[]
17. I understand how my work fits into the overall aim of the organisation [] []	[]	[]	[]	[]	[]
18. I am pressured to work long hours [] []	[]	[]	[]	[]	
19. I have a choice in deciding what I do at work [] []	[]	[]	[]	[]	

20. I have to work very fast ☐ ☐ ☐ ☐
21. I am subject to bullying at work ☐ ☐ ☐ ☐
22. I have unrealistic time pressures ☐ ☐ ☐ ☐
23. I can rely on my line manager to help me out with a work problem ☐ ☐ ☐ ☐ ☐
- Strongly Disagree Disagree
- Neutral Agree Agree
24. I get help and support I need from colleagues ☐ ☐ ☐ ☐
25. I have some say over the way I work ☐ ☐ ☐
26. I have sufficient opportunities to question managers about change at work ☐ ☐ ☐ ☐ ☐
27. I receive the respect at work I deserve from my colleagues ☐ ☐ ☐
28. Staff are always consulted about change at work ☐ ☐ ☐
29. I can talk to my line manager about something that has upset or annoyed me about work ☐ ☐ ☐ ☐ ☐
30. My working time can be flexible ☐ ☐ ☐ ☐
31. My colleagues are willing to listen to my work-related problems ☐ ☐ ☐ ☐
32. When changes are made at work, I am clear how they will work out in practice ☐ ☐ ☐ ☐ ☐
33. I am supported through emotionally demanding work ☐ ☐ ☐ ☐ ☐
34. Relationships at work are strained ☐ ☐ ☐ ☐
35. My line manager encourages me at work ☐ ☐ ☐ ☐

MBI-GS

Copyright: MindGarden Inc.

0	1	2	3	4	5	6
Never	Sporadic (Few times a year or less)	Now and Then (Once a Month or Less)	Regular (Few Times a Month)	Often (Once a Week)	Very Often (Few Times a Week)	Daily

Please mark a number on the right of the statement to indicate how often you have experienced these feelings.

1	I feel emotionally drained from my work.	
2	I feel used up at the end of	

	the workday.	
3	I feel tired when I get up in the morning and have to face another day on the job.	
4	Working all day is really a strain for me.	
5	I can effectively solve the problems that arise in my work.	
6	I feel burned out from my work.	
7	I feel I'm making an effective contribution to what this Organisation does.	
8	I have become less interested in my work since I started this job.	
9	I have become less enthusiastic about my work.	
10	In my opinion, I am good at my job.	
11	I feel exhilarated when I accomplish something at work.	
12	I have accomplished many worthwhile things in this job.	
13	I just want to do my job and not be bothered.	

14	I doubt the significance of my work.	
15	I have become more cynical about whether my work contributes anything.	
16	At my work, I feel confident that I am effective at getting things done.	

The following information is just for contextual purposes. However, you are not obliged to fill in the answers if you have completed the above questionnaires. Please be aware that throughout this questionnaire process, confidentiality is assured – there will be no identifying features on the questionnaire responses. Please highlight/circle responses.

Age 20 and under 21 to 30 31 to 40 41 to 50 51 to 60 61 and above
Length of employment 6 months and under 6-12 months 1 to 3 years 5-10 years 10 years and above
Sex Male Female Other
Department Name: Building Control Environmental Services Museum Services Planning Services
Professional Support Unit Protective Services Other

Appendix 4: Email Invitation to Study 1

Good morning

All employees working for [name of Service 6] have been invited to take part in an external stress survey. If you wish to participate then please can you do so before Friday 1 July.

As a team member of [name of Service 6], you are being invited to take part in a joint project between the Council and Anglia Ruskin University. Working with IT systems, organisational communication and work-based relationships with both peers and managers are all common examples of the problems faced by employees on a daily basis. If not resolved, this type of stress has the potential to affect a person in many ways; for instance, work performance, home life and a person's health can suffer as a result of excess stress in the workplace. As a responsible employer that is keen to assist employee wellbeing wherever possible, the Council wants to help you with these everyday issues by creating a working environment that minimises such stressors and thereby generating a more pleasant daily experience as an employee.

Why have you been asked to take part?

Your service is taking part in this project because of the diverse nature of its job roles and generally representative nature of [service 6] occupations when compared with [name of PAO] as a whole.

What will you be asked to do?

Fill in a brief, simple survey. It has been designed so that it only takes a few minutes of your time, and can be completed either by clicking the 'Survey Monkey' link

([https://www.surveymonkey.com/s/wellbeing-at-\[service6\]](https://www.surveymonkey.com/s/wellbeing-at-[service6])) or completing a hard copy, which you can request from Jermaine Ravalier (details below). The survey is based on a method designed by the Health and Safety Executive, and has been developed to ensure **complete anonymity** on your part. This means that, no matter how you answer the questions, there is no way that we will be able to trace the answers back to any person.

The survey consists of two parts: one to assess the amount of stress you may be experiencing, and another to assess the type of stress. Using 'Survey Monkey' means that no names or addresses are recorded, and as such we don't know whose answers are whose, and we have provided confidential stamped addressed envelopes for those with hard copies to ensure that responses come straight back to the lead researcher, and no one else.

What's in it for me?

You'll be able to contribute to improvements in your working environment, and that of your colleagues, which should have a positive impact on your wellbeing. The whole process will take very

little of your time and will ensure that your voice is heard when any organisational changes are considered in the future. You will also be offered the opportunity to discuss the process as a whole, or parts of it, as well as feedback of the results should you wish to.

[https://www.surveymonkey.com/s/wellbeing-at-\[service6\]](https://www.surveymonkey.com/s/wellbeing-at-[service6])

Thank you in advance for taking part in this survey. It will only take about 5 minutes to complete but your participation is going to play an important part in the future wellbeing strategy of [service 6]. If you have any questions or queries, feel free to confidentially get in contact with Jermaine Ravalier via the contacts below.

Yours sincerely,

Jermaine Ravalier (Jermaine.ravalier@anglia.ac.uk ; 07850 683008)

Appendix 5: Hard Copy Invitation to Survey 1

Jermaine Ravalier

c/o Dr Andrew McVicar
Faculty of Health and Social Care
Anglia Ruskin University
William Harvey Building
Bishops Hall Lane
Chelmsford CM1 1SQ
Tel: 07850 683008
Jermaine.ravalier@anglia.ac.uk

R.E.: Well-Being at [service 6] Work Survey

Dear Sir/Madam

Thank you for considering taking part in this organisational survey. The purpose of this survey is two-fold: to allow the organisation to gauge levels of stress, and to understand what stressors that you as an employee face in your working day. The results of this survey are going to be used, in conjunction with further research which you may be invited to take part in, to deal with some of the stressors encountered.

The main premise of this survey, combined with the future research which is to take place in the next couple of months, is to listen to your views and opinions as to what is happening in the organisation. Therefore interventions to deal with stress will be designed by implementing your suggestions, as we all understand that you know what issues you face at work.

As such, please find attached a copy of the Survey Tools for completion. These tools are:

1. **Management Standards Indicator Tool:** a tool designed by the *Health and Safety Executive* to assess the *type* workplace stress you may be feeling.
2. **Maslach Burnout Inventory-General Survey:** a tool designed to assess the potential impact of these stressors.

It is understood that the confidentiality of your answers is very important to you. As such we have tried as hard as possible to show you that your answering is confidential and that there are no agendas here. Therefore your response is going to be sent to the lead researcher at Anglia Ruskin University, via [name of wellbeing officer] at [name of PAO]. There are also to be no names or identifiable features asked for on the questionnaires, and as such there will be no way that answers given can be traced back to any particular individual.

In completing the questionnaire please do not take too long or dwell on questions - immediate responses are likely to be the most accurate. Therefore this should take you no more than 5 to 10 minutes to complete.

Thank you for taking the time to complete this survey. Your participation is going to play an important part in the well-being strategy of [name of PAO].

Yours sincerely,

Jermaine M Ravalier
(Contact details above)

Appendix 6: Survey 1 MSIT analysis tool outcomes.

MSIT analysis tool results and suggested future targets.

	Your results	Suggested Interim Target	Suggested Longer Term Target
Demands	3.03	3.10	3.29
Control	3.67	3.72	3.72
Manager's Support	3.45	3.51	3.65
Peer Support	3.75	3.80	3.89
Relationships	3.85	3.90	4.04
Role	4.09	4.17	4.31
Change	3.01	3.08	3.24

Key:



Doing well – need to maintain performance.
Represents those at, above or close to the 80th percentile.

Good, but need for improvement.

Represents those better than average but not yet at, above or close to the 80th

Percentile:

Clear need for improvement.

Represents those likely to be below average but not below the 20th percentile.



Urgent action needed.

Represents those below the 20th percentile.

MSIT analysis tool results and suggested future targets.

Appendix 7: Interview Schedule

INTRODUCTIONS

- ☐ Explain about myself and role at ARU PAO.
 - ☐ Read and fill in the 2 consent forms.
 - ☐ Any questions about the purpose of the study.
 - ☐ Elaborate on anonymity.
 - ☐ If at any time you want to stop we can do.
- This bit to last approx 5-10 minutes
- and

WHATS BEEN WORKING WELL AND WHY

- ☐ 1. Over the last couple of working weeks, have there been any areas of your work, the organisation, communication in the organisation etc that have made your work particularly stand out for the better? I.e. lighten the stress load which you may feel at work.
 - ☐ 2. What particularly is it about these areas which help?
 - ☐ 3. Of these areas, do you think there is any way that any of them that can be transferred into areas of the workplace that aren't working quite as well?
 - ☐ 4. Explain positive results of the Log phase.
 - ☐ 5. Elaborate upon these, and how they may be implemented to other areas.
- 10 minutes

POSITIVE RESULTS OF THE MSIT

Explain the positive results of the study.

- As I'm sure you are aware you were asked to complete two questionnaires either online or via hard copy. The point of these were to:
 - Assess what areas of the workplace are working best with respect to stress, as well as those areas that aren't working quite as well.
 - Assess the impact, if any, that this stress has had on your overall mental health.
 - The results of the first questionnaire, which looked at how 7 areas of the workplace are performing, showed that you have good levels of 'control' and good 'relationships'.
 - In other words, you have a good amount of say in the work that you perform and you work well with colleagues, with little conflict between employees or bad behaviour from colleagues/management.
 - ☐ 6. Would you agree in general with these findings?
 - ☐ 7. If yes, why? If no, why?
- 10 minutes

☐ 8. Do you think aspects of either of these elements could be transferred to other areas of the workplace? For example, most people could decide when to take a break; felt they had a say in their own work speed; and felt their working time could be flexible.

POSITIVE RESULTS OF THE MBI-GS

- The second questionnaire looked at three particular potential outcomes of chronic/prolonged workplace stress and indicated that employees had moderate levels of Exhaustion and Cynicism toward their work.
 - In other words individuals did not feel overly tired out at the end of the working day; and individuals have a normal attitude (i.e. not cynical) towards their work.

5 minutes

☐ 9. Would you agree with this assessment?

☐ 10. If yes, why? If no, why?

AREAS WHICH NEED IMPROVEMENT

However, I'm sure that there are areas of the workplace which you feel may be in need of improvement.

☐ 11. Can you think of any areas which can be improved which may lighten the stress load you face?

- ☐ 12. How exactly do you think these areas could be improved?
- You know better than I do the situation within the organisation better than I do. Do you think these suggestions are feasible at the moment?
 - What feasible changes do you think could be made?

☐ 13. Any further comments etc you'd like to make?

10 minutes

☐ Demographic information.

Appendix 8: Interview Participant Information Sheet

Exploring and Managing Workplace Stress: An Appreciative Approach

The purpose of this information sheet is to explain why a piece of research is taking place in your workplace, and what it entails.

The research is being led by Jermaine Ravalier from the Faculty of Health and Social care, Anglia Ruskin University:

What is the Purpose of the Study?

Managing stress in the workplace is a very important part of [name of organisation]'s well-being strategy. This project, which is being led by Jermaine Ravalier from Anglia Ruskin University, aims to work with teams in your directorate (name of Service 6) on a case study project related to the day-to-day workplace stress that you may face in your job. You are being invited to take part in an interview for a wider discussion of the findings from the 'Log' stage which recently ran. The aim of the study is to identify examples of everyday good practice, and how the basics of this good practice can be put into practice into other areas. *Please be assured that the study is not about assessing individual performance.*

Why Have I Been Chosen?

You have been chosen to take part either because you are an [name of Service 6] employee.

What Would Happen if I Take Part?

You will be given the opportunity to discuss the results of the Log stage. Therefore you will be able to put forward your thoughts and feelings on any area you deem necessary of further exploration within the context of the study.

Do I Have to Take Part?

No. Completion is entirely voluntary and you can withdraw from the interview at any time. Should you wish your interview comments to be removed from the study then you are free to do so without penalty. However, please be assured that all data will be coded and anonymised and any comments retained will not be attributable to you.

What are the possible benefits of my taking part?

You will be contributing to an evaluation and improvement of some of your team's working practices that are likely to contribute to well-being and effective working.

What are the risks involved in taking part?

There are no real risks to your taking place in this interview stage. Your comments will be kept anonymously, and you will be offered the chance to read through Jermaine Ravalier's analysis of the interview once this has been done. If at this stage you are unhappy with any part of the interview, you may remove these comments without penalty.

Will my taking part in the study be kept confidential?

The identities of interviewees will be held securely in a locked filing cabinet at Anglia Ruskin University. Only the lead researcher will have access to the information. All files or working materials from the project will be anonymised.

Information from interviews will be recorded by Jermaine Ravalier using field notes and a digital recorder. Anonymity will be ensured by making certain that views expressed cannot be traced back to any one person within the notes and transcripts, other than a code for use in analysis of the discussion by the lead researcher. In the unlikely event that the contribution of an individual *is* noted, perhaps because that person's specific role in the organisation is of particular relevance to an issue under discussion, then this will be by pseudonym only.

No participants will be named in reports arising from the interviews.

What will happen to the results of the study?

The aim of the interview is to give participants the chance to comment further on previous results. The results of the interviews will be combined with the data from a Focus Group phase, and a final report shall be placed onto the [name of organisational intranet]. It is also intended that the findings will be a part of Jermaine Ravalier's thesis as a PhD student at Anglia Ruskin University, and may therefore be published in an academic forum. No participants will be identifiable in any dissemination

Who is funding the research?

The research is funded by Anglia Ruskin University.

Who has reviewed the study?

The project has been scrutinised and reviewed by the faculty's research degrees committee, a body of senior researchers. The chief executive of the organisation and your executive director have both been consulted in the process.

Thank you for reading this information sheet. If you agree to take part, you will be asked to sign the attached consent sheet.

Appendix 9: Interview Consent Form

Managing workplace stress: a participatory approach.

The research is being led by:

Dr Andrew McVicar, Faculty of Health & Social Care, Anglia Ruskin University. Tel 01245 493131 ext. 4137, email Andy.Mcvicar@anglia.ac.uk, and

Dr Carol Munn-Giddings, Faculty of Health & Social Care, Anglia Ruskin University. Tel 01245 493131 ext. 4100, email Carol.Munn-giddings@anglia.ac.uk.

Lead contact within [name of PAO] is with [name of person], Executive Director, Tel 01206 282901, email [removed for anonymity]

Please initial box

1. I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason ☐
3. I have been informed that the confidentiality of the information I provide will be safeguarded ☐
4. I agree to take part in the above study. ☐

Data Protection: I agree to the University¹ processing personal data which I have supplied. I agree to the processing of such data for any purposes connected with the Research Project as outlined to me

Name of Participant Date Signature

Name of Person taking consent
(if different from researcher) Date Signature

Researcher Date Signature

Name of witness (print).....Signed.....Date.....

YOU WILL BE GIVEN A COPY OF THIS FORM TO KEEP

If you wish to withdraw from the research, please complete this slip and return it to Dr Andrew McVicar at the address above.

Managing workplace stress: an appreciative approach.

I WISH TO WITHDRAW FROM THIS STUDY

Signed..... Date.....

Please print name:

Group:.....

Appendix 10: Focus Group Schedule

1. Thank everyone for coming.
2. Explain who the two of us are and explain our roles at ARU, [PAO] and in the project.
3. Explain how data is to be recorded in the focus group (i.e. flip-chart & Andy).
4. Get individuals to introduce themselves – first names or what they'd like to be called throughout the process.
5. How the data has been gathered, managed and evaluated up to this point.
6. Set the grounds rules – give individuals the chance to set others.
7. Explain that many things have come out of the various aspects of the process, many of which can be put into the four/five main categories that we are going to focus on (15 mins to here).

Issue 1 to be discussed:

- IT issues – 15 mins

Issue 2 to be discussed:

- Email – 15 mins

Issue 3 to be discussed:

- Communication (with managers & staff) – 15 mins

Issue 4 to be discussed:

- Don't feel listened to. – 15 mins

Issue 5 to be discussed

- Don't know what help is available

Issue 6 to be discussed

- Feel separate from [Name of main organisational hub]

Issue 7 to be discussed

- Pay slips / intranet

Interventions brought up in logs and interviews (Just in Case):

IT

- Have IT champions/forum where issues can be resolved.

Email

- Have an organisation-wide drive from management down to use email as last line of communication.
- Use email only as a method of backing up what has been said in verbal communications – saves time.

Communication

- News letter
- Minutes/agenda at all team meetings.

Don't Feel Listened to

- 'Suggestion box'/online equivalent

Don't know what help is available.

- Make things available more readily

Feel separate from [Name of main organisational hub]

- Stop 'cakes in the kitchen' emails

Pay slips

- Offer choice of online or hard-copy (hard copy with reason)

8. Give participants the chance to add anything they'd like to (15 minutes)
9. Thanks and goodbye!

Appendix 11: Focus Group Ground Rules

1. Everything said is confidential – what's said in here stays in here.
2. Nobody will be named in the report which comes from this.
3. Everyone will be given the chance to have their say.
4. Listen actively – respect others when speaking.
5. Speak from your own experiences, not generalisations (e.g. 'we', or 'everyone').
6. Respectfully challenge others, but no personal attacks.
7. One person speaks at a time.

Appendix 12: Survey Tool Journal Article

The Management Standards Indicator Tool and evaluation of burnout

ABSTRACT

Background: Psychosocial hazards in the workplace can impact upon employee health. The UK Health & Safety Executive's (HSE) Management Standards Indicator Tool (MSIT), appears to have utility in relation to health impacts but we were unable to find studies relating it to burnout.

Aims: To explore the utility of the MSIT in evaluating risk of burnout assessed by the Maslach Burnout Inventory-General Survey (MBI-GS).

Methods: A cross-sectional survey of 128 borough council employees. MSIT data were analysed according to MSIT and MBI-GS threshold scores, and by using multivariate linear regression with MBI-GS factors as dependent variables.

Results: MSIT factor scores were gradated according to categories of risk of burnout according to published MBI-GS thresholds, and identified priority workplace concerns as Demands, Relationships, Role and Change. These factors also featured as significant independent variables, with Control, in outcomes of the regression analysis. Exhaustion associated with Demands and Control (Adjusted $R^2 = 0.331$), Cynicism associated with Change, Role and Demands (Adjusted $R^2 = 0.429$), and Professional Efficacy associated with Managerial Support, Role, Control and Demands (Adjusted $R^2 = 0.413$).

Conclusions: MSIT analysis generally has congruence with MBI-GS assessment of burnout. The identification of Control within regression models but not as a priority concern in the MSIT analysis could suggest an issue of the setting of the MSIT thresholds for this factor, but verification requires a much larger study. Incorporation of Relationship, Role and Change into the MSIT, missing from other conventional tools, appeared to add to its validity.

Key Words: Stress, Management Standards Indicator Tool, burnout, Maslach Burnout Inventory.

INTRODUCTION

In 2004 the UK Health and Safety Executive (HSE) released a generic Management Standards Indicator Tool (MSIT); [1] for the evaluation of psychosocial hazards associated with stress in the workplace. Studies indicate that the tool has utility when applied alongside various self-report health impact measures ([2-5]), but it has not been evaluated specifically against risk of burnout.

Burnout is an outcome of long-term exposure to psychosocial hazard, and is commonly assessed using the Maslach Burnout Inventory-General Scale (MBI-GS), but a search (May 2012) of *MedLine* and *PsycInfo* databases failed to identify any studies in which the MSIT has been evaluated against the MBI-GS. This study therefore aims to evaluate the concurrent administration of these tools.

METHODS

A cross-sectional survey involving the MSIT and MBI-GS was conducted during September to October 2011 in a large public sector organisation that provides front-line services to the public. Ethical approval was obtained from the Anglia Ruskin University Research Ethics Committee.

The MSIT ([6]) is a reliable 35-item self-report scale designed to evaluate psychosocial hazards in the workplace. It involves Likert-type scales that relate to seven factors: demands, control, managerial support, peer support, relationships, role and change ([7]). The MBI-GS ([8]) is a reliable 16-item self-report scale with questions in the form of a Likert scale which correlate to three factors related to burnout: exhaustion, cynicism and professional efficacy ([9]).

Piloting the combined survey amongst university colleagues (n=24) did not identify operational issues. It was therefore distributed to a convenience sample of all employees (n=181) of a borough council department, either via a Survey Monkey link (www.surveymonkey.com) using email (n= 164) or hard copy to those without staff email accounts (n=27).

Data were largely analysed using SPSS software (version 17; SPSS Inc.), and by HSE analytical software that provides comparison of MSIT scores against benchmarks derived from organisations across the UK to identify areas with degrees of priority for intervention ([10]). Sensitivity of the tool was further explored by evaluating MSIT scores following stratification of the dataset according to MBI-GS thresholds for 'high', 'moderate' or 'low' risk categories for all three component factors ([9]).

All cases were then subjected to bivariate (Pearson's r) analysis to establish background associations, and to stepwise linear regression analysis to examine best-fit models, with MBI-GS factors as dependent variables. Statistical significance was at the $p<0.05$ level.

RESULTS

Eight paper and 120 online responses to the survey were received, a return of 67%. Median ranges for respondent age and time of employment was 41-50y (n= 38; 30%), and 5-10y (n= 36; 29%), respectively. There was a slightly higher proportion of women (n= 59; 47% vs n= 40; 32%. Note: 21% did not respond to this question).

Cronbach alpha coefficients of internal reliability for all factor sub-scales ranged from 0.79 to 0.93, and were deemed acceptable. Stratification of the dataset according to MBI-GS scores identified that mean scores for all MSIT factors were gradated according to burnout category (Table 1). Collective analysis of MSIT scores identified four factors; demands, managerial

support, role and change, that scored lower than the 80th percentile of norms and so considered high priorities for intervention.

[Table 1 near here]

Bivariate analysis of all cases (online table supplement) identified that MSIT factors were significantly correlated, except for control versus demands. MBI-GS factors were also correlated, except for exhaustion versus professional efficacy. Most MSIT factors were significantly correlated with those of the MBI-GS.

Stepwise linear regression analysis (Table 2) suggested a significant model of association ($p < 0.001$; Adjusted $R^2 = 0.353$) for exhaustion, with demands as the only significant independent variable. Extraction of non-significant factors markedly decreased the Adjusted R^2 to 0.298, and subsequent secondary analysis identified a model involving both demands ($p < 0.001$) and control ($p < 0.001$) with an Adjusted R^2 of 0.341. For cynicism, initial analysis indicated a model of association ($p < 0.001$; Adjusted $R^2 = 0.418$) involving change ($p < 0.001$), role ($p < 0.01$), and demands ($p < 0.05$). Extracting non-significant factors slightly increased the Adjusted R^2 to 0.429. Demands remained a statistically weak factor but its extraction considerably decreased the Adjusted R^2 to 0.406. For professional efficacy, initial analysis indicated a model of association ($p < 0.001$; Adjusted $R^2 = 0.403$) with management support, control ($p < 0.001$), demands ($p < 0.01$) and role ($p < 0.05$) as independent variables. Extraction of non-significant factors increased the Adjusted R^2 to 0.413. Role remained just significant but its extraction decreased the Adjusted R^2 to 0.390. For all models values for tolerance (range 0.651-0.980) and Value Inflation Factor (1.021-1.536) were acceptable suggesting collinearity was not an issue. The regression analysis therefore also identified the priority factors identified by the MSIT analysis together with control which was not identified by the MSIT as a priority area.

[Table 2 near here]

DISCUSSION

The sample represented over 70% of the department under examination but less than 10% of the whole organisation. The study also was conducted at a time when economic austerity was threatening job losses. Findings therefore should be interpreted with caution.

The MSIT appears sensitive to risk of burnout, and this study therefore supports findings from related studies involving psychological impact measures. ([2-5]). Priority outcomes according to MSIT thresholds were largely supported. The exception was control, which was absent as a priority outcome but appeared as an independent factor, or co-factor, in models for professional efficacy and exhaustion. Much larger studies are required to verify if this signifies uncertainty of the lower threshold for control in the MSIT in respect of burnout.

Other ‘Job-Demand-Control-Support’ tools do not specifically include in their constructs the three factors (relationships, change and role) identified as key areas of concern by the MSIT, and as variables within the regression modelling. The MSIT therefore potentially offers flexibility, and possibly better discrimination, in evaluating burnout in the workplace.

To conclude, the MSIT generally demonstrated utility to evaluate burnout as an outcome of workplace stress but this requires confirmation by a larger study. Its construct appears to offer a comprehensive measure for assessing workplace psychosocial hazards and associated health risk.

Key Points:

- The MSIT has utility to evaluate the impact of psychosocial hazards in the workplace, as measured using the MBI-GS.

- Data suggest that the threshold score (in this sector) for control as an MSIT factor of that signifies priority for intervention may require further study, though the small-scale nature of the current study suggests caution in this assessment.
- Inclusion of role, change and relationships within the MSIT adds useful extra dimensions to the Job-Demands-Control-Support model.

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Table 1: Comparison of total sub-scale scores for MSIT factors for cases within MBI-GS scoring categories. Values are means +/- SD. Statistical comparison by Independent t-test, apart for ⁺ when Mann Witney test was applied as normal distribution of data could not be confirmed.

	Demands	Cont rol	Managerial support	Peer support	Relationships	Role	Change
<u>MBI-GS scoring category</u>							
High (n= 15; 12% of total)	26.3 +/- 5.7	19.6 +/- 4.2	13.0 +/- 3.4	12.8 +/- 3.6	9.8 +/- 3.7	17.7 +/- 2.8	6.9 +/- 1.8
Moderate (n=8; 6%)	22.1 +/- 5.0	23.3 +/- 4.4	19.3 +/- 3.6	16.2 +/- 2.4	7.6 +/- 2.2	21.7 +/- 2.4	10.5 +/- 2.4
Low (n=13; 10%)	19.7 +/- 4.8	23.8 +/- 5.3	22.0 +/- 3.5	18.4 +/- 1.2	6.4 +/- 2.9	22.7 +/- 2.7	12.1 +/- 2.2
Difference, High vs. Low	<i>P</i> <0.01	<i>P</i> <0.05	<i>P</i> <0.001	<i>P</i> <0.001 ⁺	<i>P</i> <0.05	<i>P</i> <0.001	<i>P</i> <0.001

Note: MB-GS scoring category relates in each instance to respondents who scored in the category for all 3 component factors. Participants (n= 92; 72%) who scored in the category for just one or two factors are not included in this analysis.

Table 2: Stepwise linear regression analysis results with MBI-GS factors as Dependent Variables and MSIT factors as Independent Variables.

Tool	Factor	Significantly Related Factors	Coefficient Estimate (B)	T	P	R ²	Adjusted R ²
Maslach Burnout Inventory- General Scale	Exhaustion	Demands	.767	7.89	.001	.341	.331
		Control	-.291	-2.67	<0.01		
	Cynicism	Change	-.413	-4.99	.001	.443	.429
		Role	-.269	-3.94	.001		
		Demands	-.174	2.47	<.05		
	Professional Efficacy	Managerial Support	.655	4.85	.001	.431	.413
		Role	.467	2.42	<0.05		
		Control	.361	3.41	.001		
		Demands	.307	3.23	<0.01		

Supplementary Table: Bivariate (Pearson's r) correlations for MSIT, MBI-GS and MSIT vs. MBI-GS factors. *** p<0.001; ** p<0.01; * p<0.05

Dimension	Demands	Control	Peer Support	Managerial Support	Relationships	Role	Change	Exhaustion	Cynicism	Professional Efficacy
Demands	0.142									
Control	-0.290**	0.358**								
Peer support	-0.278**	0.287***	0.681**							
Managerial support	0.305**	-	-0.524**	-						
Relationships		0.291***		0.520**						
Role	-0.304**	0.200*	0.421**	0.551**	-0.411**					
Change	-0.151*	0.258**	0.563**	0.664**	-0.449**	0.550**				
Exhaustion	.551**	-0.113	-0.314**	-	0.269**	-0.369**	-0.300***		0.601**	-0.065
Cynicism	0.312**	-0.190*	-0.425**	-	-0.394**	-0.546**	-0.585**			-0.299***
Professional Efficacy	0.111	0.438**	0.419**	0.503**	0.523**	-0.280**	0.398**	0.443**		

NB: Due to reverse question responses, a high score on the Professional Efficacy factor denotes a low efficacy

Appendix 13: Survey 2 MSIT analysis tool outcomes.

MSIT analysis tool results and suggested future targets.

	Your Results	Suggested Interim Target	Long-Term Target
Demands	2.85	3.00	3.29
Control	3.52	3.60	3.72
Peer Support	3.09	3.34	3.65
Managerial Support	3.64	3.71	3.89
Relationships	3.62	3.76	4.04
Role	3.73	4.07	4.31
Change	2.82	2.99	3.24

Key:



Doing well – need to maintain performance.
Represents those at, above or close to the 80th percentile.



Good, but need for improvement.
Represents those better than average but not yet at, above or close to the 80th percentile.



Clear need for improvement.
Represents those likely to be below average but not below the 20th percentile.



Urgent action needed.
Represents those below the 20th percentile.

MSIT
analysis
results and suggested future targets.

tool

Appendix 14: AR Project Feedback

5th January 2011

Met two teams of 10 staff members, explained the AR project and left them to consider whether or not any would take part. When none got into contact with us we asked for feedback on the process, which their manager kindly sought for us.

Responses:

- I did give this some consideration at the time and it was really the time commitment factors that were the issue. I guess with all the current financial cut-backs I also felt that it was unlikely that there would be much progress with any changes needed.

My impression of the session seemed a bit biased (on their side) towards management/communication issues.

I am willing to be involved so long as it does not encroach too significantly into my workload.

- I am willing to take part but I am unsure what more is required from us. At the last meeting we clearly outlined difficulties and frustrations that slowed or stopped us working which in turn is what caused us stress. I really look at it as a stress project but as a trouble shooting project. If my pulse was being monitored maybe I may see it differently!

At the last meeting very few notes were taken although I believe we were the last group so maybe it had all been heard before.

What I would want is stressful issues to be prioritised and taken to SMT where it was fed back to us if solutions could be found or if not why. I don't want to take part in an exercise where there is no result. If we could be informed of the time commitment and the number of meetings required up front that would be great so we know if it is doable.

On a very positive note it was not a moaning Minnie session but a very constructive and informative hour.

- I was not able to attend any of the sessions last year, but would be happy to get involved in the project, as long as there isn't too large a time commitment.
- For my part, I was not really sure what the purpose of it all way. We seemed to be asked to dig deep to search for a problem in the first place, which we would then set out to find our own solutions to. May be it was because of the way that it was pitched to us, but there did not seem to be any real benefit to us as a team at the end of the process, yet it would appear to require a considerable amount of time input from us? If this is the case, I would not be happy to take part.

- My feeling is that the timing of such a project is unfortunate. In the current financial climate most of us have far greater concerns and my impression is that stress levels are greatly elevated for reasons that are beyond the scope of the project. Most are primarily concerned with the potential impact on their jobs and that of their colleagues, which vastly overshadows the daily frustrations experienced in a more settled environment, which I understand the project was aimed at addressing.

Under these circumstances I think it is unlikely that people will want to participate, myself included. Allocating time for such a project is also stressful in itself!

- This is a surprisingly difficult email to answer. It seemed to me to be looking for an answer to a question nobody asked. There are stress causing elements to our job that are well known: VOIP, printer queues, hot desking but these are just part of the job now. I would rather not be involved in future meetings as to be honest I can't see any point to it and I would rather save the time.
- Hi, I think personally it is not for me. I don't really have any problems or work related stress he could help me with. Yes it is frustrating if VOIP of the printer does not work but I deal with this as the need arises, and I do not think he can help with system problems.
- I am still interested. I found it useful. No issues really, I think I would be a good subject.
- I wasn't sold on any possible outcomes, it seemed very academic at the time. However I'm willing to take part in the future, as they say "you've got to be in it to win it".

Went back to management with a revised plan, i.e. moved to AI from AR.

Responses to revised model:

- I am going to opt out of this, main reason is, I don't always end my day in the office and would not be completing a diary once I have got home to my house! Thinking back the stresses were very minor, no pens or stationary, slow systems etc...I am not a stressed person, I feel manage my time effectively...only stresses I suffer from are a very small number of clients...nothing that can be done about that.
- I am still happy to participate.
- Yes I am happy to take part under the proposed scheme that you have set out.
- This seems more reasonable, as I think that XXX team have a good working relationship and generally resolve any problems issues as they

arise and I was concerned that, previously, we were being asked to look for problems that we didn't have. If the time commitment to the project is as you describe, I would be willing to participate.